EuropeAid

Climate Change in Latin America

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Foreword

Sustainable Development and Climate Change: What is the Situation in Latin America?

Climate Change was one of the most important issues on the agenda of the Lima EU-LAC Summit of May 2008 during which the firm commitment was made to jointly tackle this challenge.

The aim of the EUrocLima Programme, identified in the Lima Declaration, is to promote knowledge sharing, fostering structured and regular dialogue at all levels and ensuring synergies and coordination of current and future actions in this field.

Within this framework, the European Commission decided to fund a study which would ascertain the problems related to climate change within Latin America. This study aims to identify the extent of climate change effects, the question of vulnerability and the ecological footprint of the region, taking into consideration the institutional framework of this multidisciplinary challenge both on regional and national levels.

In order to obtain reliable information as well as to ensure the necessary involvement and coordination between all actors, a questionnaire was elaborated by the European Commission addressing both the Latin American countries and EU Member States.

The analysis of the results has revealed the diversity of responses from Latin American countries with regard to the problems identified, the perception of their own vulnerability, the definition of priority issues and necessary instruments as well as the potential solutions.

This study has also highlighted the common problems faced by the region (such as the sometimes limited knowledge on issues related to climate change and the lack of human and financial resources) as well as the need to raise awareness of this issue especially at the political level.

The study has essentially provided an overview of the situation in Latin America and will allow for advancement of the sustainable development cause and enrich debates on climate change in the region.

The paths thus far identified will be implemented within the framework of the EUrocLIMA programme which aims to reinforce political dialogue, to improve systems and channels for the exchange of information and finally to provide and/or strengthen technical and institutional capacity in the Latin American region.

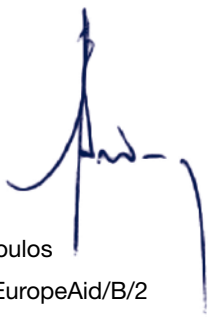

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Table of contents

List of acronyms

CAAAM	*Comité Andino de Autoridades Ambientales* (Andean Committee of Environmental Authorities)
ACCLAC	*Alianza para la Mitigación y Adaptación al Cambio Climático y Gestión del Riesgo en América Latina y el Caribe* (Alliance for the Mitigation of and Adaptation to Climate Change and Risk Management in Latin America and the Caribbean)
ACT	Amazon Cooperation Treaty
CA	Central America
CAF	*Corporación Andina de Fomento* (Andean Development Corporation)
CAIT	Climate Analysis Indicators Tool
CAN	*Comunidad Andina de Naciones* (Andean Community of Nations)
CAPRADE	*Comité Andino para la Prevención y Atención de Desastres* (Andean Committee for Preventing and Dealing with Disasters)
CATHALAC	*Centro del Agua del Trópico Húmedo para América Latina y El Caribe* (Water Centre for the Humid Tropics of Latin America and the Caribbean)
CATIE	*Centro Agronómico Tropical de Investigación y Enseñanza* (Tropical Agricultural Research and Higher Education Centre)
CAZALAC	*Centro del Agua para Zonas Áridas y Semiáridas de América Latina y el Caribe* (Water Centre for Arid and Semi-arid Zones in Latin America and the Caribbean)
CC	Climate Change
CCAD	*Comisión Centroamericana de Ambiente y Desarrollo* (The Central American Environment and Development Commission)
CDM	Clean Development Mechanism
CDSMHI	Conference of Directors of Ibero-America's Meteorological and Hydrological Services
CEPREDENAC	*Centro de Coordinación para la Prevención de los Desastres Naturales en América Central* (Coordination Centre for the Prevention of Natural Disasters in Central America)
CIDA	Canadian International Development Agency
CIIFEN	*Centro Internacional para la Investigación del Fenómeno del Niño* (International Centre for Investigation into the El Niño Phenomenon)
COP	Conference of the Parties
CRRH	*Comité Regional de Recursos Hídricos* (Regional Committee on Water Resources)
DNA	Designated National Authorities
EU-LAC	Summit of Heads of State and Government from Latin America, the Caribbean and the European Union
ECLAC	Economic Commission for Latin America and the Caribbean
ENSO	El Niño - Southern Oscillation
EU	European Union
FCAC	*Foro del Clima de América Central* (Central America Climate Forum)
FMAM	*Fondo para el Medio Ambiente Global* (Global Environment Facility)
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
GTZ	*Gesellschaft für Technische Zusammenarbeit* (German Agency for Technical Cooperation)
IAI	Inter-American Research Institute
IHP	International Hydrological Programme
IICA	Inter-American Institute for Cooperation on Agriculture
INDN	Inter-American Network for Disaster Mitigation
IPCC	Intergovernmental Panel on Climate Change
IRI	International Research Institute for Climate and Society
ISDR	International Strategy for Disaster Reduction
KP	Kyoto Protocol
LA	Latin America
LDC	Less Developed Country
LUCLUF	Land Use, Change of Land Use and Forestry
MDG	Millennium Development Goal
NGO	Non-governmental Organisation
OAS	Organisation of American States
OECD	Organisation for Economic Co-Operation and Development
OLADE	*Organización Latinoamericana de Energía* (Latin American Energy Organisation)
PARCA	*Plan Ambiental de la Región Centroamericana* (Environmental Plan for the Central America Region)
PIACC	*Programa Iberoamericano de Evaluación de Impactos, Vulnerabilidad y Adaptación al Cambio Climático* (Ibero-American Programme for the Evaluation of Impacts, Vulnerability and Adaptation to Climate Change)
PFCs	Perfluorocarbons
PPP	Public Private Partnership
RAS	Regional Agri-environmental Strategy
RedLAC	*Red de Fondos Ambientales de Latino América y el Caribe* (Latin American and Caribbean Network of Environmental Funds)
RIOCC	*Red Iberoamericana de Oficinas de Cambio Climático* (Ibero-American Network of Climate Change Offices)
SIAM	*Sistema de Información Ambiental Mesoamericano* (Central American Environmental Information System)
SICA	*Sistema de Integración Centroamericana* (Central American Integration System)
SIDS	Small Island Developing States
TTF	The Tropics Foundation
UCI	*Universidad para la Cooperación Internacional* (University for International Cooperation)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change

List of figures

List of tables

Introduction

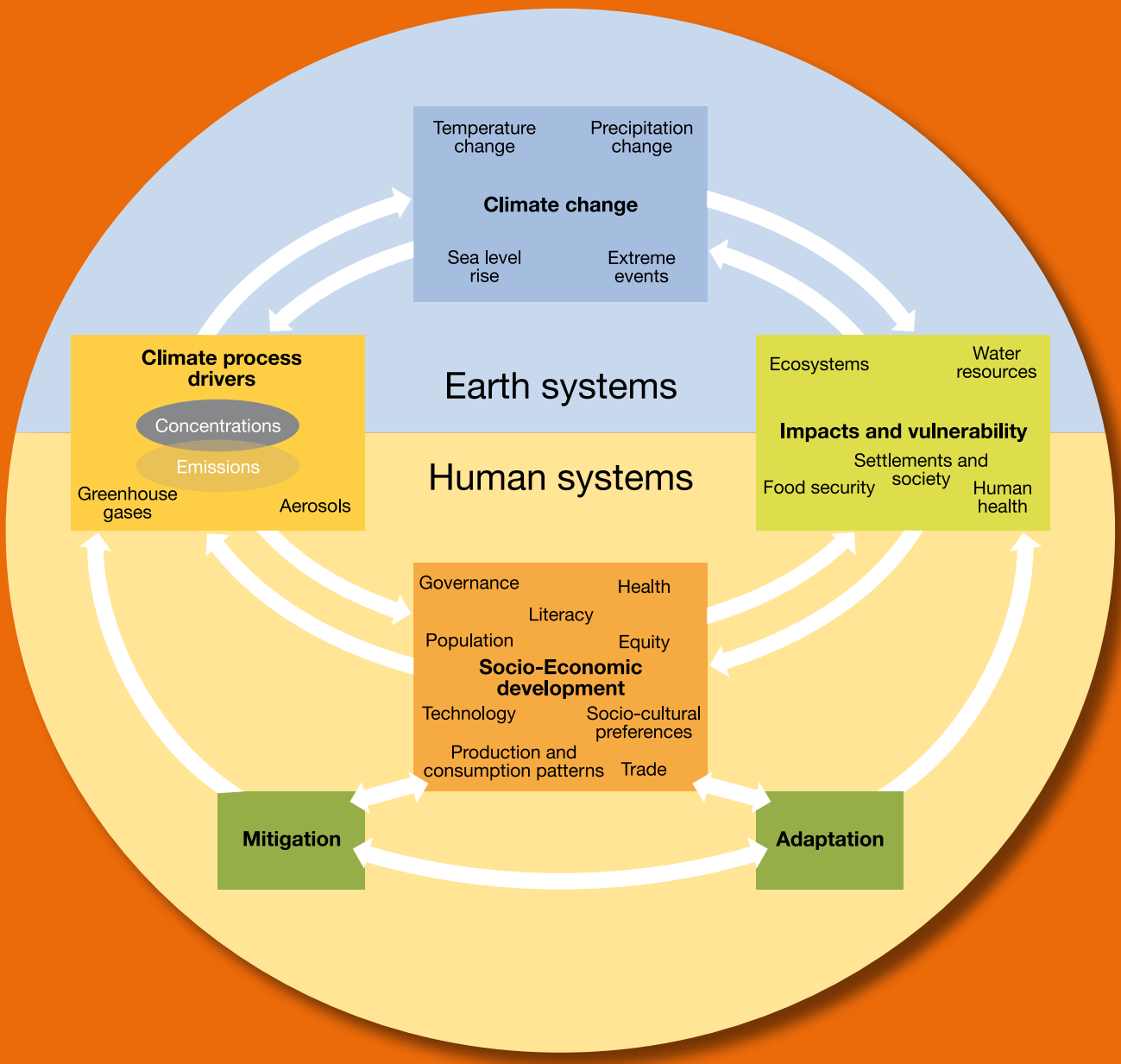

Figure 1 Schematic diagram of the anthropogenic causes and impacts of climate change and of responses and inter-relations. (Source: IPCC, 2007).

Sustainable Development and Climate Change at the V Latin America and Caribbean-European Union Summit

Climate Change is the most serious challenge of our time and a large-scale global problem that involves complex interactions between climatological, environmental, economic, social, political and institutional processes.

Attempts to adapt and mitigate climatological impact share some common objectives with efforts to promote sustainable development, such as: access to resources (including knowledge), equity in the distribution of resources and citizen participation mechanisms, risk distribution and decision making skills to tackle situations of uncertainty (Figure 1).

Sustainable development: the environment, climate change and energy was one of the key issues at the V Summit between the heads of state and government of Latin America and the Caribbean-European Union, which took place in May 2008 in Lima, and at which Latin American and EU countries signed the Lima Declaration.

The Lima Declaration underlines the close relationship between development opportunities and a concerted search for actions which can be taken against Climate Change: "*overcoming poverty, inequality and exclusion is crucial to achieve social cohesion*" *[…]* "*Environmental degradation and Climate Change seriously affect our economic growth, they especially harm the poor and are seriously threatening all of the future perspectives of our peoples*".

During the meeting, the leaders of all parties committed to:

- boosting bi-regional cooperation with an **integrated view on environmental matters**, mainly focused on Climate Change, desertification, energy, water, biodiversity, forests, fishing resources and the handling of chemical products. Above all, they committed to achieve this **through economic policies** that take into account the needs of protecting the environment and strengthening social inclusion;
- building the EU-LAC dialogue on the foundations of the bi-regional negotiations that were held in Bali, with the aim of **deepening bi-regional coordination**, along with the collective cooperation activities that led to the COP 15 in Copenhagen and the establishment, during the same period, of **an ambitious and global agreement on the Second Period of Compliance with the post-2012 Kyoto Protocol**.

Regional cooperation between the European Commission and Latin America is creating the opportunity to strengthen the multilateral system of actions and compromises, making this system more effective and facilitating new synergies in common global issues. The goal of the dialogue should be a holistic focus that makes it possible to connect social, ethic, cultural and environmental elements on the one hand and aspects of sustainable development on the other.

In 2008, when Slovenia and France held the Presidency of the EU Council, the two actions shown below were promoted as part of the Action Plan for Climate Change in the Context of Development Cooperation[1] and as a form of cooperation between the EU and the Latin American and Caribbean countries:

- the EU's **Global Alliance against Climate Change**[2], aimed at less developed countries (LDC) and small island developing states (SIDS), for the benefit of the CARIFORUM countries and the
- **EUrocLIMA Initiative**[3], in benefit of Latin American countries.

The objectives of the **EUrocLIMA Initiative**, identified by the EU-ALC leaders are the following:

i. to share knowledge;
ii. promote a structured and regular dialogue at all levels; and
iii. to ensure synergy and coordination of current and future actions in this field.

Not all the countries of Latin America take the same position on Climate Change. This is due to geographical and economic differences, the extent to which they are vulnerable to the phenomenon, their economic dependence on fossil energy resources or the fragility of their ecosystems. However, in spite of the differences mentioned above, the Region has to seek a way of consolidating its position, agreeing on a strategy and reaching a common consensus about the need to implement adaptation and mitigation programmes.

Methodology for identifying the current status of the situation

The foundations for close collaboration have been laid and there have been positive experiences in different areas that can and must be shared at a regional level. To identify possible collaborative actions, the manner in which Latin American countries handle the problems of climate change has been analyzed. The following observations are based on the analysis of a survey initiated by the European Commission Office of Cooperation (EuropeAid B/2) and carried out in collaboration with the EC delegations, the focal points and the Designated National Authorities (DNA) in the context of the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP).

The questionnaires addressed five issues: (i) causes, problems and vulnerabilities; (ii) institutional context; (iii) national and regional strategies and policies; (iv) actors; (v) international and bi-lateral cooperation actions (see Annex 1). Almost all the countries have completed the questionnaire and reviewed the report. The only country that has not provided a reaction to the report is Cuba.

The results obtained have been presented, analyzed and supplemented under the following parameters: (i) effects and impacts, (ii) vulnerabilities, (iii) ecological footprint and (iv) institutionality.

The survey has made it possible to create country records (see Annex 2), which provide details on international commitments, the legal structure, the functions of the institutions working in the field of climate change, the nature of the coordination at the national and international level, climate change policies and the identified mechanisms of adaptation and mitigation.

A survey of the member states of the European Union was also carried out in order to establish a global vision of the financing and implementation of programs and projects related to climate change in Latin America. Annex 3 brings together the information that the following countries communicated to the EC: Belgium, Czech Republic, Denmark, Finland, Germany, the Netherlands, Spain and the United Kingdom. Two countries responded that that they do not have any cooperation development projects in this field in Latin America: Lithuania and Slovenia.

The aim of **this report** is to identify the following:

i. the main impacts and anthropogenic actions that increase vulnerability;
ii. the legal and institutional advances in the region on the subject of Climate Change;
iii. the main directives that can be used to structure a dialogue to lay the foundations for future cooperation activities between the two regions and, similarly, for leadership at an international level at the post-2012 Kyoto Protocol international negotiations.

1 Communiqué from the European Commission to the Council and the European Parliament, *Climate Change in the context of development cooperation* [COM (2003) 85 final - Official Gazette C7 2004/76], March 2003 and the European Commission's Directorate General for the Environment, 2006, EU action against Climate Change, cooperating with developing countries to counteract the impact of Climate Change.

2 European Commission, Brussels 18.9.2007, COM (2007) 540 final, Communication to the Council and European Parliament, Building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to Climate Change.

3 Point 52 of the Lima Declaration.

1. Context

1.1. Impacts of Climate Change

According to the Intergovernmental Panel on Climate Change or IPCC (2007), the following climate scenarios can be forecast for Latin America:

- Increase in temperature and the corresponding decrease in soil humidity would lead to tropical rainforests on the eastern side of the Amazon region being gradually replaced by savannahs.
- Semiarid vegetation would gradually be replaced by arid land vegetation.
- Significant losses of biological diversity could occur, with the extinction of species in many areas of tropical Latin America.
- The productivity of some important crops would decrease, leading to a decrease in the productivity of cattle farming, with adverse consequences for food security. The yield of soy bean crops would improve in temperate areas. Together with this, the number of people threatened by hunger would generally increase.
- Changes in rainfall patterns and the disappearance of glaciers would notably reduce the availability of water for human, agricultural and hydroelectric consumption.
- An increase in sea level would cause more floods, storm surges, erosion and other dangerous coastal phenomena.
- The deterioration of conditions on the coast, for example as a result of beach erosion or the de-colouration of corals, would affect local resources.

1.1.1. Central America and Mexico

Central American countries and small island states are considered to be the most vulnerable areas in the world. This vulnerability is due to their geographical location, a strip of land surrounded by the Atlantic and Pacific oceans. This makes them subject to the greater frequency and intensity of extreme climate phenomena, and this problem is made more serious by the exacerbation of intense rainfall. An analysis of the behaviour of tropical cyclones in the Central American region shows that the violence of these extreme phenomena has increased since 1995: 4 out of the 10 strongest hurricanes occurred during the last 10 years. This trend of greater intensity is a result of the forecasted increase of the surface seawater temperature in the Caribbean, the Gulf of Mexico and the Mexican Pacific of between 1 and 2°C. Based on physical considerations, higher seawater temperatures increase the efficiency of tropical cyclones, making the occurrence of higher categories of cyclones more likely.

Rising sea levels would make these areas more susceptible to floods, the modification of coastal and marine ecosystems, which would in turn produce changes to the distribution and availability of fishing resources and the risk of the salinisation of neighbouring aquifers.

Furthermore, the northern regions of Mexico would be affected by drought, changes to rainfall patterns and the phenomena of desertification, among other effects.

The region's vulnerability is made more acute by the demographic pressure that is a characteristic of certain areas. This goes along with the lack of suitable land use plans, dependence on water resources for generating electricity, the level of poverty and the fact that a lot of inhabitants depend on natural resources for their subsistence.

1.1.2. Andean Region

Evidence has been seen for Climate Change in the Andean sub-region for more than three decades. Whereas global temperature changes of 0.2°C per decade have been recorded worldwide since 1990, the temperature increase in the Central Andes region between 1974 and 1998 was 0.34°C; in other words, 70% more than the global average. The alteration of bodies of water associated with the receding and disappearance of glaciers would affect access to sources of water for human consumption, which would almost necessarily have serious repercussions for cities like Lima.

Numerous hydroelectric energy systems would be negatively affected. Subsistence agricultural systems are already being affected by anomalous rainfall patterns and increases in temperature. Mountain ecosystems (moorland, high altitude wetlands, montane forests) are amongst the ecosystems that are most sensitive to Climate Change. Although there is no solid scientific evidence, recent data suggest that alterations to the water cycles in these high altitude ecosystems could be related to the high number of forest fires that have occurred over the last decade.

These alterations to the water cycles would cause imbalances that could have repercussions even for the Amazon region.

El Niño and La Niña (El Nino Southern Oscillation or ENSO) are climatological phenomena that represent a threat. Studies carried out in Peru suggest that the intensity of this phenomenon will increase and it will probably occur more frequently due to the effect of Climate Change. Over the last seven years, emergencies caused by floods, droughts, landslides and freezing weather, amongst others, have doubled. This shows the region's vulnerability as regards adaptation, along with the necessity of responding to these phenomena.

1.1.3. Amazon Basin

After the long period of drought in 2005, computerised forecasting systems detected that the integrity of the Amazon rainforests could be affected by the processes of savannah expansion. Over the past decades, increases in temperature and erratic rainfall have led to a massive reversal in carbon absorption. Trees are dying out more rapidly where the droughts have been most intense. For years the Amazon Basin has been helping slow down global warming. If this ecosystem doesn't function properly, or if it breaks down entirely, levels of carbon dioxide in the atmosphere will go up.

The environmental consequences of the conversion of tropical forest to savannah would imply other changes to the region's rainfall patterns, including modifications to the savannah and flooded savannah systems, which would also be affected. The social consequences would affect the different nations that are present in the basin.

1.1.4. Southern Cone

Significant impacts are also forecasted for the Southern Cone as a result of changes to rainfall patterns. The frequency and intensity of extreme climate events like floods, droughts, storms, tornadoes and heavy rain have increased in Argentina as a result of global warming and Climate Change. Research that has been carried out shows that this hydrological response has led to temperature increases, especially in the southern part of the Continent.

The receding of glaciers in the Andes mountain range implies a decreased level of flow in the rivers that supply the cities and irrigated valleys in the northern regions of Argentina and Chile, intensifying the effects of the desertification process. Regions in the centre and south of Chile are also being affected the recession of its numerous glaciers. In some provinces of Argentina inhabitants believe that Climate Change is one of their main problems. In the low-lying coastal regions and estuaries in Argentina and Uruguay, an increase in sea level could reduce biological diversity and the amount of coast, damaging infrastructure and leading to saltwater intrusion. If the rising sea level were to block the flow of rivers on the plains towards the ocean, the risk of flooding could increase in these basins.

1.2. Regional Vulnerability

Table 1 shows a summary of the perceptions of national governments regarding Climate Change at a national level, according to the sector and geographic area.

Different perceptions of vulnerability

The perception of vulnerability to the same effects varies substantially from one country to another. The environmental impact is common to the regions, but the way in which this vulnerability is perceived varies depending on socio-economic conditions, political priorities in the countries and the level of knowledge of the possible impact of Climate Change at a national and local level. For example, two nations like Bolivia and Peru, both of which are affected by similar climate impacts, perceive their vulnerabilities in different ways: the first nation prioritises the basic needs of its population (food security), whereas the second evaluates the impacts in terms of social cohesion and stability.

Furthermore, the descriptions of phenomena that can be attributed to Climate Change varies greatly: countries like Argentina and Mexico know how to identify priority provinces and states and they can tell which sectors are most affected. Other countries, however, only mention ecosystems or sectors where they imagine that Climate Change could have a greater effect, mostly based on information shared through reports produced by the IPCC workgroups.

The Andean countries are applying traditional knowledge and native species in order to tackle the threat of drought and temporal changes to rainfall patterns. As an example, the UNFCCC has identified two ancient techniques from amongst these: the Waru Waru systems in Peru (an ancient system of irrigation and drainage) and the Qhuthañas system in Bolivia, which permits water resources to be collected and preserved. Bolivia and Peru have managed cooperation projects with NGOs on this matter and they have been able to identify traditional local varieties which have the specific characteristics of being able to adapt to new microclimates.

The perception amongst Central American countries and Mexico is that agriculture (subsistence and market crops) is one of the sectors affected most by Climate Change. With other priorities like health, security and education, governments have not been able to take adaptation and/or mitigation measures to tackle the problem, but special national efforts can be identified. Their actions are centred around discontinuous warning systems and sporadic actions at a local level. The warning and risk prevention systems in the Southern Cone are more effective and allow a response to be given to the requirements of local populations and the productive sectors, mostly in relation to cattle farming.

The rural population in the Amazon Basin has a very high level of vulnerability, as the region lacks basic services (for example only 58% of Brazil's rural population has access to drinking water, and this has increased by only 1% over the last 15 years[4]), while at the same time it attracts numerous settlers from different countries in the basin. From amongst the cases studied by the UNFCCC, it is worth mentioning an adaptation strategy that focuses its efforts on a very common species of palm tree. This tree has a low ethnobotanical and economic value, but it represents a source of food in case drought and food security problems occur (collection of fruit from the attalea speciosa species for the production of oil and proteins).

Adaptation and vulnerability

Adaptation measures can reduce this vulnerability, especially when they are taken as part of wider reaching initiatives in the sector. There is also a political awareness that information and experiences have to be shared with the sector in charge of managing the risk of disasters during the time when adaptation measures are put in place.

Some Latin American countries have made efforts to adapt by conserving ecosystems, setting up early warning systems and putting strategies in place to deal with droughts and floods, as well as managing their coastal areas and providing support to their health systems. However, there is a clear lack of basic information and there are few systems in place to observe and monitor poverty conditions and the settlement of populations in very vunerable areas.

4 Population with sustainable access to the best sources of drinking water supply, per urban and rural area (UNCEF-WHO) MDG. - Goal 7 / Target 7.C / Indicator 7.7, data from 1990 to 2006.

Table 1 National overview of the perception of climate impacts and main vulnerabilities per sector and geographical area (Source: questionnaires).

Country	Effects			
	Thermal Variations	Variations in Rainfall	Extreme Events	Rise in Sea Level
Argentina	Receding Glaciers	Floods Droughts	Storms Tornadoes	
Bolivia	Receding Glaciers	Floods Droughts Hailstorms	Intensification of El Niño and La Niña	
Brazil		Floods Droughts	Cyclones	
Chile	Receding Glaciers	Droughts		
Colombia	Receding Glaciers			Floods Salinisation of aquifers
Costa Rica		Floods Droughts		Floods
Cuba				
Ecuador	Receding Glaciers	Floods Rainfall		
El Salvador		Rainfall Drought	Hurricanes Tropical storms	
Guatemala			Hurricanes Tropical storms	
Honduras		Rainfall Drought	Hurricanes Tropical storms	
Mexico		Rainfall Drought	Hurricanes Tropical storms	Floods in Coastal Regions
Nicaragua		Rainfall Drought Floods	Intensification of El Niño and La Niña	
Panama	Changing Patterns	Changing Patterns	Storms	
Paraguay		Droughts	Storms with hailstones	
Peru	Receding Glaciers	Rainfall Desertification	Intensification of El Niño and La Niña. Emergencies due to natural disasters	Increase Sea Level, Temperature Changes Humbolt Current
Uruguay		25% increase in rainfall over 30 years	Intensification of extreme events	Rise in Sea Level Floods
Venezuela				

Vulnerabilities			
Social	Economic	Environmental	
		Ecosystems	Regions/Areas
		Native forests, Water resources	Santa Cruz, Tierra del Fuego, San Juan, Catamarca and Mendoza
Food and Health Security	Agricultural Infrastructure	Water resources, Bio-diversity, Ecosystems	Glaciers, Yungas and the Yungas Montane forest, Beni Flooded Savannahs
	Agriculture	Native forests, Caatinga (xeric shrubland)	Amazonas, South West
Health	Water sector, Energy, Fishing	Areas susceptible to erosion, Forests	Low-lying coastal zones, arid and semi-arid zones
Health	Fishing	Moorland Coral Reef	Coastal zones, mountain ecosystems
Populations with scarce resources, Health	Agricultural Infrastructure	Water resources Biodiversity	Coastal zones
Human resources		Water resources, Natural systems	Coastal Areas, salinisation of aquifers
Health	Agriculture	Water resources, Coastal areas	
Health	Agriculture	Montane forest, Mangroves, Coral reefs, Water Resources	
Health, Food security	Infrastructure and public services	Water Resources, Forest Resources	
Health, Food security	Road infrastructure, Agriculture	Forest Resources (pine forests)	Atlantic Coast, Southeastern region
Health	Agriculture and the fishing sector	Water Resources, Forest Resources, Bio-diversity, Wetlands	Northeast, North-Central, Caribbean and Gulf of Mexico
Health, Food security, Displaced people	Agriculture, Public and private infrastructure	Forest Resources, Water Resources	Central and Atlantic Areas
Human resources, Health	Coastal-marine sector, Agriculture		
Health	Agriculture	Water Resources, Forest Resources	
Health, Forced migrations, Intensification of conditions of poverty/ extreme poverty, Governability		Advancing desertification, Biodiversity	
	Agriculture Hydroelectric energy	Water Resources, Biodiversity in coastal zones	Coastal Areas, salinisation of aquifers
		Biodiversity, species in danger of extinction	

1.3. Regional Ecological Footprint

The ecological footprint consists of both the impact of human activities on an ecosystem as well as the corrective measures taken to mitigate such impact. Consequently this is a key indicator of sustainability.

In this report the Greenhouse Gas emmissions (GHGs) from the 18 countries have been used as way of evaluating the impact of human activities on the environment. In Latin American countries, GHG emissions have the following characteristics:

- a medium level of contribution to worldwide GHG emissions, especially if the total GHGs (12% of world emissions) are compared to the world's population and the share of GDP (both equal to 8.5%);
- per capita CO_2 rates show values greater than the averages of Annex 1 countries;
- greater CO_2 emissions due to changes in soil use and forestry (USCUSS), which are higher than the amount of CO_2 absorbed, in spite of the fact that the Latin American tropical rainforests are the planet's main "green lung";
- average CO_2 emissions from USCUSS are almost three times the world average and greatly exceed emissions from other sectors;
- the average CO_2 y CH_4 emissions produced by the agricultural sector (excluding USCUSS) represent 70% of the remaining emissions, and the contribution of CH_4 is higher than averages in the world and in Annex 1 countries.

Evidence for these points can be found when the data is analysed using a CAIT (Climate Analysis Indicators Tool). The data include the amount of CO_2 produced by fossil fuels and the cement industry (1850-2005); CO_2 due to change in soil usage (1950-2000), CH_4, N_2O, HFCs, PFCs, and SF6 (1990, 1995, 2000, and 2005); and Houghton, R.A. 2008, for the regional trends in changes of soil usage up to 2005[5]. The GGE data presented in the National Communications from the 18 countries could not be used, as there is now way of performing temporal analyses. Many countries only presented a GHG inventory. Only four countries presented this for the year 2000 and only one for after 2000.

Table 2 summarises the perception of the causes of GHG production in the different countries, according to the information given in the questionnaires.

5 Data related to Greenhouse Gas (GHG) Emissions was drawn up based on the data provided by the Climate Analysis Indicators Tool website, version 6, by the World Resources Institute, updated to 2005 (www.cait.wri.org). In order to investigate regional trends in changes to soil usage up until 2005, data was used from Houghton, R.A. 2008. Carbon Flux to the Atmosphere from Land-Use Changes: 1850-2005. In: TRENDS: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A.

Table 2 Table summarising the causes of environmental pollution and the production of GHGs in the 18 Latin American countries, or physical factors that increase vulnerability to climate impacts (Source: questionnaires).

Country	Environmental Problem
Argentina	Deforestation / transformation of natural environments, mining operations, overexploitation of fauna and natural sites, iInterruption / modification of watercourses.
Bolivia	Deforestation, mining, change in soil use and degradation of soil.
Brazil	Deforestation / transformation of natural environments, energy.
Chile	Deforestation, geographical concentration, uncontrolled industrial processes.
Colombia	No data.
Costa Rica	Change in soil use, increase in number of obsolete vehicles, demographic pressure in metropolitan area.
Cuba	Soil degradation, reduced forestry coverage, pollution, loss of biodiversity, lack of water.
Ecuador	Deforestation and soil use change, forestry, enteric fermentation, waterlogging of rice and transport.
El Salvador	Deforestation, transport and solid waste.
Guatemala	Electricity generation, transport, deforestation.
Honduras	Energy, transport, land use change and forestry, industry, waste.
Mexico	Deforestation, energy, transport, land use change and forestry, industry, waste.
Nicaragua	Land-use change, agriculture and energy.
Panama	Deforestation, production of greenhouse gases.
Paraguay	Deforestation and soil use change, demographic pressure, extensive farming activity.
Peru	Deforestation, energy, agriculture.
Uruguay	Transport, agriculture.
Venezuela	Progress on the agricultural front, deforestation, oil pollution, mining.

Figure 2 shows how GHG emissions are distributed in percentage between the energy, industrial processes, agriculture, waste and land use change and forestry sectors. The data from Central American countries lacks information about emissions from the farming sector. As regards the Mercosur countries, data for emissions from each sector in Paraguay lack details about CO_2 emissions from the energy, agriculture and waste sectors.

There are no great differences in the three sub-regions (Central American Integration System (SICA), Andean Community and the Southern Common Market) between the distribution of GHG emissions per sector in percentage terms, although the average deforestation rates in the Central American countries are almost double that of the South American countries.

The link that exists between demographical increase and energy use, with a tripling of CO_2 production, suggests that investment in energy systems has been directed towards production systems that use large amounts of fossil fuel.

The greatest differences can be seen within the sub-regions, where Cuba and Uruguay stand out as countries that have achieved a positive and effective reforestation policy (their reforestation rates are 32% and 66% respectively, over 15 years).

Argentina, Chile and Mexico are the other countries whose LUCLUF CO_2 emissions stand at less than 30%.

The data on emissions from the agricultural sector is incomplete. However, the countries that generally produce a greater proportion of emissions in this sector are the Mercosur countries: Uruguay, Paraguay, Argentina and the CAN countries Bolivia and Ecuador.

Cuba is the country in the region that depends most on fossil fuels for energy production, followed by Mexico, Venezuela and Chile. The countries with the greatest emissions from the transport sector are: El Salvador, Chile, Mexico and Costa Rica. Colombia, Mexico, Argentina and Chile are the countries that emit the greatest amount of gas from waste.

Other analyses show a parallel between emissions produced by the 18 Latin American countries and the 27 EU Member States. The numerous points where the two groups of countries coincide confirms that there could be interchange of experiences in dealing with these issues.

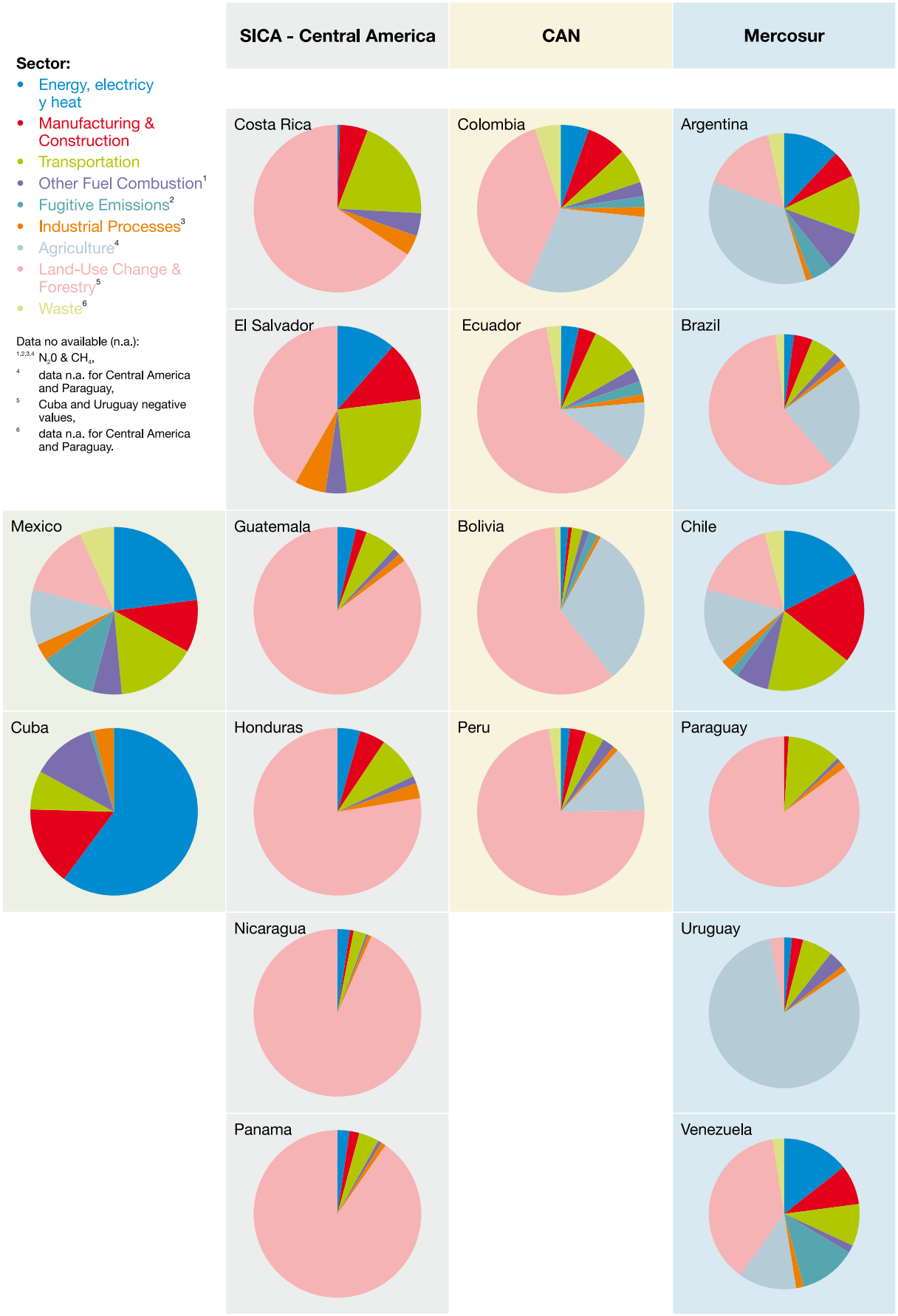

Figure 2 % Distribution of GHG emissions from the energy, industrial, agriculture, waste and soil use change sectors in the 18 Latin American countries.

1.4. Regional Institutional Framework

With the EU's political support, the Latin American countries are carrying out a process of political, economic and social integration.

The issue of the environment is gaining ground in the legal statutes and institutional structures of numerous intergovernmental organisations, and regional and sub-regional integration is being strengthened by the role played by several research centres and networks for the exchange of Climate Change knowledge and experiences and/or matters related to the sector.

1.4.1. Intergovernmental Organisations

The Latin American countries coordinate their actions and policies in the sector through regional organisations (see Table 3). These political associations aimed at economic integration include regional and/or international environmental matters as part of their agendas. The table also shows the intergovernmental organisations in the Caribbean, as Cuba is a very active member. The Latin Parliament and the Latin American Energy Organisation are the two organisations that represent all of the Latin American states at the Conferences of the Parties. All of the other intergovernmental organisations operate at a regional level.

Latin America

PARLATINO - The **Latin American Parliament** is a permanent regional organisation with a single chamber, which is made up of the Latin American National Parliaments which signed the corresponding Institutionalisation Treaty in 1987. The Congresses and Legislative Assemblies of the Party States come together to make up the Latin American Parliament[6]. The Latin American Parliament is composed of the following bodies: (i) The Assembly; (ii) The Chief Executives Board; (iii) The Permanent Committees; and (iv) The Secretary General. The fourth of this parliament's discussion panels addresses the environment and tourism, and coordinates its position with the Conference of the Parties. It is carrying out a regional communication programme on environmental citizenship in conjunction with the UNEP.

OLADE - The **Latin American Energy Organisation** was created in 1973 with the aim of being the political and technical support organisation through which its Member States could make joint efforts to achieve regional and sub-regional energy integration. Its mission is to contribute to the region's integration, sustainable development and energy security, providing advice and encouraging cooperation and coordination between its Member States (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela; Barbados, Cuba, Grenada, Haiti, Jamaica, Trinidad and Tobago and the Dominican Republic; Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Mexico). OLADE also works to promote an increase in the sustainable use of renewable and clean energies, as well as other energy efficient alternatives, with specific programmes at a national and sub-regional level.

Central America

SICA - The **Central American Integration System** is the institutional framework for Central American Regional Integration[7]. Through its departments, technical committees and projects, this institution carries out direct actions and coordinates aspects related to the environment, Climate Change, energy, human resources and disaster prevention.

CCAD - The **Central American Environment and Development Commission** is the organisation responsible for the regional environmental agenda, and represents the member states at the UNFCCC. In order to achieve its objectives, the CCAD has drawn up the Central American Region Environmental Plan (PARCA), a medium and long-term strategy that is implemented through (i) the prevention and control of pollution, (ii) the conservation and sustainable use of natural heritage and (iii) the strengthening of institutions on matters concerning environmental policies and legislation. The CCAD also manages the **Central American Environmental Information System** (SIAM) which brings together the region's different environmental information systems and measures the efforts to conserve forested areas and biodiversity. The **Regional Agri-Environmental Strategy** (RAS) is a very recent joint effort being made by several SICA agencies to identify agricultural practices that are sustainable and adapted to Climate Change, which prove that it is possible for agro-forestry systems to exist in harmony with the management of the Central American Biological Corridor. The **Coordination Centre for the Prevention of Natural Disasters in Central America** (CEPREDENAC) was created in 1993 and coordinates international emergency cooperation and facilitates the exchange of experiences between institutions and the countries in the area. The **Humanitarian Information Network for Latin America and the Caribbean** (Redhum.org) was created in 2006 with support from OCHA[8], SICA and CEPREDENAC. It provides coordination tools and information for decisions being made on disaster management.

6 The Netherland Antilles, Argentina, Aruba, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, The Dominican Republic, Suriname, Uruguay and Venezuela.

7 Formed in 1991 by the states of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

8 United Nations Office for the Coordination of Humanitarian Affairs.

CRRH – The **Regional Committee on Water Resources**, created in 1979, coordinates actions on matters related to water. The Central America Climate Forum, with economic support from the CE[9], offers information for creating climate forecasts for the management of food security risks. Another project is carrying out the design, development and implementation of a Climate Database for Central America.

EMSA – **Middle-American Strategy for Environmental Sustainability**, was signed in June 2008 by the Middle American Ministers of the Environment. EMSA was initiated by Mexico and is based on three key priorities: (i) Climate Change; (ii) bio-diversity and forests; (iii) environmental competitiveness.

South America

UNASUR is the newest organisation for regional integration between the South American states (Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela). This organisation considers the fight against the causes and effects of Climate Change one of its specific objectives, alongside the protection of biodiversity, water resources and cooperating for the prevention of catastrophes.

Andean Region

CAN – The **Andean Community**[10] coordinates its environmental actions through the Andean Environment Agency, with the aim of strengthening the capabilities of its Member States on environmental and sustainable development issues. Its aim is to direct the actions taken by the Council of Ministers for the Environment and Sustainable Development and the Andean Committee of Environmental Authorities. The main issues tackled by the CAAAM are: Climate Change, biodiversity, water resources and preventing and dealing with disasters. CAAAM acknowledges the complementarity and the cross-sectoral nature of Climate Change related problems. This is shown in Directive 32, which resolves to put the "Andean Council of Ministers for the Environment and Sustainable Development in charge of formulating an Andean strategy for tackling and mitigating the negative effects of Climate Change, in conjunction with the Andean Council of Ministers for Foreign Relations and the Advisory Committee to the Ministers for Energy…" (Andean Presidential Council, July 2004). With support from the UNDP and the Spanish Cooperation Agency, it drew up two reference documents on climate impacts and priorities.

CAPRADE – The Andean **Committee for Preventing and Dealing with Disasters** is a CAN organisation whose objective and mandate is to contribute to reducing the risk and impact of natural and man-made disasters through coordinating and promoting policies, strategies and plans. They also promote activities to prevent, mitigate, prepare for and deal with disasters and encourage cooperation and mutual assistance for rehabilitation and reconstruction and the sharing of experiences on the subject.

CAF – The **Andean Development Corporation** is a multilateral financial institution which provides many different banking services to clients from the public and private sectors of its stake-holding countries[11] by attracting financial resources from international markets to Latin America. The Corporation is committed to sustainable development and regional integration, which are its main objectives. The CAF contributes to reducing the problem of Global Warming through the Latin American Carbon and Alternative Clean Energies Programme (PLAC+e). It also encourages the use of clean and alternative energies in Latin America through the development and funding of two megaprojects (the Wigton wind energy project and the mass transport system).

Amazon Basin

The ACTO is the organisation that has been created to strengthen and promote the **Amazon Cooperation Treaty** (ACT) signed between Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela, with the aim of encouraging joint actions for the harmonious development of the Amazon Basin. In order to fulfil the role that it plays in the region, the ACTO's Strategic Plan calls for the creation and implementation of a regional programme for the integral management of water resources in the Amazon Basin, amongst other actions. In this context, the aim of the GEF Amazon ACTO/UNEP/OAE project since 2005, with the support of member states, has been to strengthen the institutional framework for planning and executing activities for the protection and sustainable management of the soil and water resources in the Amazon river basin in a coordinated manner, against the impacts caused by human actions and Climate Change.

Mercosur

Mercosur – The **Southern Common Market**, is an economic organisation. Its Secretary and Working Groups (6 dedicated to the environment) carry out joint initiatives between the four participating countries. The Mercosur has been especially active in carrying out regional projects related to clean and high quality production.

9 European Commission.

10 This is a community of four countries (Bolivia, Chile, Colombia, Ecuador), created in 1969 as the Pacto Andino (Andean Pact) Venezuela renounced its membership of CAN in 2006 and Chile participates as an associate member.

11 Almost all of the Latin American states, but with a particular focus on the Andean countries.

Table 3 Regional and sub regional institutions related to Climate Change.
The Institutions are classified by type and organisations representing the Party Nations in the Conferences of Parties are marked with an asterisk (*).

Name and Type of Institution	Recent activities related to Climate Change
INTERGOVERNMENTAL ORGANISATIONS	
Latin American Parliament* Discussion panal on the environment and tourism	It is carrying out a regional communication programme on environmental citizenship, in conjunction with the UNEP.
Latin America Energy Organisation*	Numerous projects for increasing the sustainable use of renewable and clean energies and other energy and energy efficient alternatives, with specific programmes at a national and sub-regional level.
Organisation of American States Department of Sustainable Development	Programme to Reduce the Risk of Natural Disasters and the Inter-American Disaster Mitigation Network.
The Central American Environment and Development Commission*	Environmental Plan for the Central America Region; Central American Environmental Information System; Guidelines on the Regional Strategy for Climate Change, Regional Agri-environmental Strategy, Central American Biological Corridor.
Coordination Centre for the Prevention of Natural Disasters in Central America	Humanitarian Information Network for Latin America and the Caribbean, projects to prevent natural risks and disaster management with the support of the EU.
Regional Committee on Water Resources	Central America Climate Forum, with EU support; BID RG-T1203 project for the design, development and implementation of a database of climate data for Central America.
UNASUR	Combate the causes and effects of Climate Change, together with the protection of biodiversity, water resources and cooperation for disaster prevention.
Andean Community*, Andean Council of Ministers for the Environment and Foreign Affairs	The Andean Environmental Agenda envisages the formulation of a strategy to tackle and mitigate the negative effects of Climate Change. Creation of two reference documents on climate impacts and priorities (UNEP and AECI).
Andean Commission for Preventing and Dealing with Disasters	Prevention of natural risks and disaster management projects (EU).
Andean Development Corporation	The Latin American Carbon and Alternative Clean Energies Programme (PLAC+e), Wigton megaprojects for wind energy and mass transport system.
Amazon Co-operation Treaty Organisation	Regional Programme for the Integral Management of Water Resources in the Amazon Basin.
Common Southern Market Work Group 6 for the Environment	Regional clean production projects (EU).
RESEARCH CENTRES	
Water Centre for the Humid Tropics of Latin America and the Caribbean	Strategy for Adapting Water Resources and Agriculture in Central America, Cuba and Mexico to Climate Change.
Water Centre for Arid and Semi-arid Areas of Latin America and the Caribbean	Database and atlas on the subject; CAMINAR Study (The Management of Basins and the Impact of Mining in Arid and Semi-arid regions of South America), financed by the EU, Research into the Management of Climate Risks.
International Centre for Investigation into the El Niño Phenomenon	Scientific and applied research projects into ENSO and climate variability on a regional scale.
Inter-American Institute*	Scientific excellence.
Economic Commission for Latin America and the Caribbean	Economic studies on the impact of Climate Change, using the Stern methodology (EU).
Inter-American Institute for Cooperation on Agriculture	Specialist publications, sustainable rural development.
Tropical Agricultural Research and Higher Education Centre	Projects for Climate Change adaptation and mitigation in the agricultural and forestry sectors, including the TroFCCA (Tropical Forests and Climate Change Adaption) and FORMA (*Fortalecimiento del MDL* en Ibero América (Strengthening CDMs in Ibero-America)) projects (EU).
NETWORKS	
Ibero-American Network of Climate Change Offices	Exchange of experiences and the Ibero-American Programme for the Evaluation of Impacts, Vulnerability and Adaption to Climate Change in coordination with the Spanish Cooperation Programme and the Conference of Directors of the Ibero-American Meteorological and Hydrological Services.
Alliance for Climate Change Mitigation and Adaptation and Risk Management in Latin America and the Caribbean	The implementation and systematisation of local mitigation and adaptation experiences and the development of Climate Change models and scenarios for agriculture (EU).
International Strategy for Disaster Reduction, Regional Office for the Americas	Regional coordination and distribution of information on the subject of disaster reduction.
Latin America and the Caribbean Network of Environmental Funds	Information and technical support for the conservation of biodiversity, Payment for Environmental Services and REDD

1.4.2. Research Centres

CATHALAC – The **Water Centre for the Humid Tropics of Latin America and the Caribbean** is an international and intergovernmental organisation whose aim is to encourage sustainable human development through applied scientific research, education and the transfer of technology related to water resources and the environment. It provides resources for improving the quality of life in countries in the humid tropics of Latin America and the Caribbean. To this end, it promotes, organises and manages programmes and applied research activities concerning water, Climate Change and land use planning. Worth a mention from amongst its recent activities is the coordination of the technical-scientific project "Strategy to Adapt the Water and Agricultural Resources in Central America, Cuba and Mexico to Climate Change[12].

CAZALAC – The **Water Centre for Arid and Semi-Arid Zones in Latin America and the Caribbean** was created in 2003. UNESCO, through its International Hydrological Programme (IHP), is the body that oversees the institution's international character. CAZALAC also benefits from technical and economic support from the Government of Belgium. The ultimate objective of CAZALAC is to strengthen the region's technical, social and educational development, based on the better use and management of water resources in arid and semi-arid areas of Latin America and the Caribbean. It also works to increase the role played by communities in the development of a water culture. The Centre provides information about the location and size of arid, semi-arid and sub-humid areas and about drought phenomena, with an emphasis on their relationship with the El Niño/Southern Oscillation (ENSO) phenomenon. Since 2007, CAZALAC has formed part of a bi-regional consortium that runs the CAMINAR study (The Management of Basins and Mining Impact in Arid and Semi-Arid regions in South America) financed by the European Union. At a national level (Chile), the Centre is working with the IRI[13] on research into how to set up a focal point and provide tools for the management of climate risks related to the management of water resources in semi-arid regions. The research looks into urban consumption and dryland and irrigated agriculture.

CIIFEN - The **International Centre for Research into the El Niño Phenomenon** runs scientific and applied research projects that are necessary to improve understanding and provide better early warning of the ENSO phenomenon and climate variability on a regional scale. It aims to contribute to the reduction of socio-economic impacts and to lay a solid foundation for the creation of sustainable development policies to confront the new climate scenarios that exist today.

12 Project "Development of the Capacities for Stage II of the Adaptation to Climate Change in Central America, Mexico and Cuba" PAN10-00014290.

13 IRI: International Institute for Research on the Climate and Society of the U.S.

IAI - The **Inter-American Institute** is an intergovernmental organisation that is made up of the 19 countries in the Americas. It is dedicated to striving for scientific excellence, international cooperation and the open exchange of scientific information with the aim of improving the understanding of the phenomena of global Climate Change and its socio-economic effects. The issues that it deals with include Climate Change and variability, comparative studies of ecosystems, biodiversity, land use and coverage and water resources, as well as modulations in the overall changes to the composition of the atmosphere, the oceans and fresh water and the evaluation of the human dimensions and the political implications of global change, variations in the climate and land use.

CEPAL - The main objective of the **Economic Commission for Latin American and the Caribbean** is to carry out analyses, draw up proposals and provide technical assistance in matters related to the economic and social development of the Ibero-American region. Amongst other activities, the commission provides support to governments for the design, creation, implementation, monitoring and evaluation of policies, programmes and projects related to different aspects of sustainable development. Climate Change is given a prioritised position in these activities.

In December 2008 as a preparatory stage for the EUrocLIMA initiative, the European Commission decided to support CEPAL's regional initiative to carry out economic studies into the impact of Climate Change, using the Stern methodology.

These studies are being carried out in coordination with the governments of Denmark, Spain, the UK and the Inter-American Development Bank.

IICA – The **Inter-American Institute for Cooperation on Agriculture** is an organisation that coordinates agricultural knowledge in the Americas. This institution releases publications on specialised themes, including biofuels and renewable energy produced by farming methods, among others. The IICA has a sustainable rural development department to support the efforts made by the member states and to strengthen the capabilities of their institution.

CATIE - The mission of the **Tropical Agricultural Research and Higher Education Centre** is to contribute to the reduction of rural poverty by promoting competitiveness and sustainability in agriculture and the management of natural resources, through higher education, research and technical cooperation.

1.4.3. Networks

RIOCC - The **Ibero-American Network of Climate Change Offices** is formed by a commission of coordinators, made up of the directors of the 21 Climate Change Offices in the member states[14]. The Director-General of the Spanish Climate Change Office acts as the head coordinator.

The aim of this Network is to serve as a tool that links the Ibero-American countries together in order to make Climate Change part of political dialogue at the highest level, as well as to give an impulse to strategies involving sustainable development and a low carbon economy, and the identification of common problems and solutions on the subject of the impact of and vulnerability and adaption to Climate Change. The RIOCC works under the supervision of Ibero-American Ministers of the Environment, to whom it also reports. In turn, the Ministers present the RIOCC's most relevant conclusions to the Ibero-American Summit, thereby guaranteeing political support. Most of the RIOCC's efforts and work have focused on adaptation, which has led to the establishment of the so-called Ibero-American Programme for the Evaluation of Climate Change Impacts, Vulnerability and Adaptation (PIACC).

The Araucaria XXI programme is a Spanish Cooperation instrument for the protection of the environment and sustainable development in Ibero-American. It provides support to the PIACC, to the Clean Development Mechanism and to the strengthening of capabilities and the promotion of dialogue with the region and the participating institutions, through their "Climate Change" activity programme. The following projects that have been identified and promoted by the Network are worth mentioning: project to evaluate the level of vulnerability of marine coastal areas to Climate Change; the cooperative project on Climate Change mitigation and adaptation for sustainable forest management in Ibero-America (the MIA - TroFCCA - FORMA projects also benefit from support from the EU), run by CATIE, Brazil's training proposal for the use of regional modelling systems; the support project for Paraguay's National Climate Change Office and the pilot humanitarian aid project for the reduction of social-environmental vulnerability; and improvements to Climate Change adaptation in Central America (AECI - Araucaria XXI Projects).

ACCLAC - The **Alliance for Climate Change Mitigation and Adaptation and Risk Management in Latin America and the Caribbean** is funded by the Tropical Agricultural Research and Higher Education Centre (CATIE), the German Cooperation Agency (GTZ), The Inter-American Institute for Cooperation on Agriculture (IICA), The Tropic Forest Foundation (TTF) and the University for International Cooperation (UCI). Itis an organisation whose aim is to carry out activities to promote ecological awareness and justice, as well as access to instruments that make it possible to mitigate and adapt to Climate Change. They aim to achieve this through the active participation of the greatest possible number of agents (central and local governments; business organisations and all social activists). They act across the board in each region and part of their projects includes facilitating and empowering dialogue, creative activities and the spread of knowledge amongst the different agents (the systematisation of experience with mitigation and adaptation and the development of Climate Change models and scenarios for agriculture).

RIMD - The **Inter-American Network for Disaster Mitigation** was set up by the Department of Sustainable Development (DSD/OAS) with the support from the Canadian International Development Agency (CIDA), as a permanent mechanism in the hemisphere to strengthen practical collaboration between intergovernmental agencies on the subject of disaster reduction. It particularly focuses on the exchange of technical information and good practices, as well as providing support for the monitoring and review of the Inter-American Strategic Plan for Policies on Reducing Vulnerability, Managing Risk and Responding to Disasters (IASP), so that the progress and lessons learnt by different national and regional strategies may be taken into account.

EIRD - Through its Regional Office for the Americas, the **International Strategy for Disaster Reduction** promotes joint and coordinated action to reduce socio-economic, humanitarian and development disasters, and offers support in the integration of different policies on the matter. They also work with broadcasting information on the subject of disaster reduction. They run awareness campaigns and produce articles, promotional material, magazines and publications related to disaster reduction.

14 Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Spain, Guatemala, Honduras, México, Nicaragua, Panamá, Paraguay, Peru, Portugal, the Dominican Republic, Uruguay and Venezuela.

CDSMHI - The **Conference of Directors of Ibero-America's Meteorological and Hydrological Services** is a very strong network that operates in the region and focuses on matters of interest to the meteorological community. It has set up an environment of work and cooperation that allows institutional and operational capabilities to be improved. It also allows experiences to be shared to increase the amount of meteorological and climatological information available about the region.

RedLAC - Since it was established in 1999, the mission of the **Latin American and Caribbean Network of Environmental Funds** has been to promote the interconnection and strengthening of Environmental Funds in Latin America and the Caribbean. It stimulates a learning system for the conservation of natural heritage and for sustainable development in the region. The Environmental Funds that are members of RedLAC have financed more than three thousand projects at a regional level and their combined annual operating budget totals over 70 million dollars per year for the entire region. RedLAC offers information and technical support for the definition of methods for the calculation of Payment for Environmental Services (PSA) and REDD.

1.4.4. National Observers

The private sector and representatives from civil society and the scientific sector may participate as observers at the COP and informally express their opinions about the decisions made by the Parties. The countries that have the greatest number of these institutions are: Argentina (24), Brazil (15) and Costa Rica (4). Colombia, El Salvador, Guatemala and Peru do not have any institutions that are listed as observers.

Numerous environmental NGOs that actively participate in the fight against Climate Change, although they are not represented amongst the COP observers.

1.5. National Institutional Framework

All 18 Latin American countries signed and ratified the Convention on Climate Change and the Kyoto Protocol and committed to preparing reports, national strategies and GHG inventories.

Table 4 contains a summary of the institutional framework and the most relevant information for each country.

The Ministers or Secretaries for the Environment and Foreign Relations are the focal points and national authorities designated to represent nations for UNFCCC and KP purposes. In terms of the Convention and Protocol agreements, they serve to represent, formulate policies and coordinate and execute activities related to Climate Change and to Clean Development Mechanisms.

After the Climate Change Convention had been ratified, most of the ministries created, as part of their organisations, inter-ministerial units, directorates or committees to draw up policies to identify and promote scientific investigation activities and to encourage coordination at a national level between the different sectors, civil society and the private sector. These Climate Change Directorates and/or Units and the Inter-ministerial Committees on Climate Change are fundamental agents for the UNFCCC in developing national measures.

A Fiche has been created for each country to analyse the structure of the focal points and National Authorities in working with the UNFCCC and KP (see Annex 2). The first part of the Fiche provides an analysis of the legal and institutional framework, responsibilities, human and financial resources, performance and the training they have received. The second part analyses the extent to which these authorities coordinate with each other at a national, sectoral and regional level and the alliances that they have made in the COP. The third part describes the sectoral policies that facilitate the application of adaptation and mitigation measures at the national level, including the quantity and type of CDM projects implemented. The countries have been geographically ordered by sub region.

Table 4 Table summarizing the legal and institutional frameworks of the 18 Latin American countries and their track record with the Convention on Climate Change and the Kyoto Protocol Conferences of the Parties (Sources: UNFCCC, Questionnaires, Reports, Strategies and National Authority Websites, RIOCC, 2006. Table by the author).

Latin American Countries	Climate Change Agreements, Dates of ratification		Institutional Framework				
	UNFCCC	Protocol of Kyoto[1]	Representative National Authority UNFCCC and PK	UNFCCC Focal Point	Designated National Authority PK	Year of notification	DNA Structure
Mexico	11-Mar-93	07-Aug-00	Secretaría de Relaciones Exteriores	Dirección CC	Programa GEI México; Programa Mex. Carbono	2004	Inter-ministerial
Cuba	05-Jan-94	30-Apr-02	Ministerio de Ciencia, Tecnología y Medio Ambiente	-	-	-	-
Guatemala	15-Dec-95	05-Oct-99	Ministerio de Ambiente y Recursos Naturales	Unidad de CC	Unidad de CC	2004	Single government
El Salvador	04-Dec-95	30-Nov-98	Ministerio del Medio Ambiente y Recursos Naturales	Unidad de CC	Oficina Salvadoreña Desarrollo Limpio	2002	Single government
Honduras	19-Oct-95	19-Jul-00	Secretaria de Recursos Naturales y Ambiente	Unidad de CC	Oficina MDL	2004	Outsourcing
Nicaragua	31-Oct-95	18-Nov-99	Ministerio del Medio Ambiente y Recursos Naturales	Dirección CC	Oficina Nacional de Desarrollo Limpio	2002	Single government
Costa Rica	26-Aug-94	09-Aug-02	Ministerio del Ambiente y Energia	Oficina Costarricense Implement. Conjunta	Asociación Costarricense Implementación Conjunta	2003	Two-unit
Panama	23-May-95	05-Mar-99	Autoridad Nacional de Ambiente	Unidad de CC y Desertificación		2003	Outsourcing
Colombia	22-Mar-95	30-Nov-01	Ministry of External Relations	Ministerio de Ambiente, Vivienda y Desarrollo Territorial	Oficina Colombiana para la Mitigación del CC		Two-unit (govt.-govt.)
Ecuador	23-Feb-93	13-Jan-00	Ministerio de Relaciones Exteriores; Ministerio del Ambiente	Subsecretaría de Calidad Ambiental	Corporación para la Promoción del MDL	2004	Two-unit (govt.-indep.)
Peru	07-Jun-93	12-Sep-02	Ministerio del Ambiente	Dirección CC (planned)	Fondo Nacional del Ambiente	2002	Two-unit (govt.-indep.)
Bolivia	03-Oct-94	30-Nov-99	Ministerio de Planificación del Desarrollo Viceministerio de Planificación Territorial y Medio Ambiente	Programa Nacional CC	Oficina Desarrollo Limpio	2002	Inter-ministerial
Venezuela	28-Dec-94	18-Feb-05	Ministerio del Poder Popular para Relaciones Exteriores	No entity	No entity	-	No entity
Brazil	28-Feb-94	23-Aug-02	Ministry of External Relations			2002	Inter-ministerial
Paraguay	24-Feb-94	27-Aug-99	Secretaría del Ambiente	Programa Nacional CC	Programa Nacional CC	2004	Single government
Argentina	11-Mar-94	28-Sep-01	Secretaría de Ambiente y Desarrollo Sustentable	Dirección CC	Oficina Argentina MDL	2002	Two-unit (govt.-govt.)
Chile	22-Dec-94	26-Aug-02	Ministry of External Relations	Comisión Nacional Medio Ambiente	Comisión Nacional Medio Ambiente	2003	Single government
Uruguay	18-Aug-94	05-Feb-01	Dirección Nacional de Medio Ambiente	Unidad de CC	Unidad de CC	2001	Single government

The order of Latin American countries follows the geographical sub-regions. The names used for National Autorities in English or Spanish, following UNFCCC information. The names of the Focal Points and DNA following local official names.

1 All countries ratified the Protocol, with the exception of Colombia and Venezuela that are still in the accession phase.

2 Implemented MDL projects as per 12/2008.

3 Internal Appreciation of Performance level & needs describes the results of AIDCO/B2 (10/08) y RIOCC (10/2006) questionnaires realized with representatives of the national focal points.

3 Classification as follow: 1. Very low: few activities; 2. Low: some activities, not systemized; 3. Moderate: systemized activities, but not at national level; 4. Good level: national systemized actions.

4 Panama: Presidential National Agenda.

Performance Level face UNFCCC & COP			Internal Appreciation of Performance level & needs[3]			
Date Last NC	NSCC	N. MDL UNFCCC[2]	Institutional Capacities	Inter-sectoral Coordination	Flow of Inform. climatic data	Knowledge level scenarios
3rd NC, 2006	2008	107	Moderate	Moderate	Moderate	Very Low
1st NC, 2001	no	1	Moderate	Moderate	Moderate	Low
1st NC, 2002	no	6	Moderate	Moderate	Low	Low
1st NC, 2000	no	5	Moderate	Moderate	Good	Low
1st NC, 2000	no	14	Moderate	Moderate	Low	Moderate
1st NC, 2001	no	3	Moderate	Moderate	Moderate	Low
1st NC, 2000	s/i	6	Good	Moderate	Good	Low
1st NC, 2001	2004[1]	5	Moderate	Moderate	Low	Low
1st NC, 2001	no	13	Moderate	Moderate	Moderate	Low
1st NC, 2000	no	13	Good	Moderate	Low	Low
1st NC, 2001	2003	12	Moderate	Moderate	Moderate	Low
1st NC, 2000	2003	2	Good	Moderate	Low	Low
1st NC, 2005	no	0	Very Low	Low	Moderate	Very Low
1st NC, 2004	2008	146	Good	Good	Moderate	Low
1st NC, 2002	no	0	Moderate	Moderate	Low	Very Low
2nd NC, 2008	2008	14	Moderate	Low	Good	Moderate
1st NC, 2000	2008	26	Moderate	Moderate	Good	Very Low
2nd NC, 2004	no	3	Moderate	Good	Moderate	Moderate

2. Context analysis

2.1. Legal and Institutional Framework

2.1.1. United Nations Framework Convention on Climate Change (UNFCCC)

Country representation

Each country has a designated representative for the UNFCCC, but the focal point is designated in formal terms. The Ministries of Foreign Relations from Brazil, Chile, Colombia, Ecuador and Venezuela, and the Department of Foreign Relations from Mexico, are the focal points recognised by the UNFCCC. The focal points of the remaining 12 countries are their environmental authorities (ministries, departments, national authorities).

In the case of Costa Rica and Cuba, the Ministries have a double function (Energy, Sciences and Technology respectively).

In all the countries the environmental authorities play a fundamental role in developing this matter.

The origins of these bodies were not the same throughout the region. Mexico and Venezuela had already created their Environment Ministries beforehand. In some countries, environmental functions were given to pre-existing bodies (public health, agriculture, urbanisation, mining, etc.); new organisations were created in other countries, often as a result of pre-existing areas of government being grouped together. After the Summit in Rio, only Bolivia formed an area of government that took on the joint responsibilities of sustainable development and the environment. Chile is still in the process of transforming its environmental authority from the National Environment Commission to the higher rank of Ministry of the Environment, whereas Peru has recently made this transformation.

The creation of most of the Environment Ministries in Latin America coincided with the 1992 Earth Summit when the Biodiversity Convention and the Climate Change Convention were signed. The first actions taken by the Ministries of the Environment were to control pollution (brown agenda), by passing laws and regulations based on direct regulation mechanisms. As the years went by, new functions were gradually added to the ministries as a response to the need to strengthen the natural resources protection system (green agenda) and to meet various international commitments.

Over recent years, a lot of the Environmental Authorities have been modernised and are promoting (i) mechanisms to include environmental aspects in development and land-use plans and (ii) the use of economic and tax incentives. This modernisation can also be seen in the creation of national environmental funds.

Structure and functions

Different approaches have been used to develop the structure and hierarchical level of the Convention's Focal Points in the 18 Latin American countries. The institutional arrangements that have been made are as follows:

- **Climate Change Units** under the command of the International Relations and/or Environmental Quality Directorates (Honduras, Chile, Colombia, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay and Uruguay);
- **Climate Change Units** included as part of the Directorate and/or Undersecretary for Environmental Quality and Clean Production (Cuba, Ecuador);
- **Directorates or Climate Programmes** with a variable number of dependencies, which are coordinated by the different agreements of the Convention (Argentina, Bolivia, Brazil, Costa Rica, Ecuador and Mexico);
- Permanent **Inter-ministerial Committees** for supervising and coordinating Climate Change actions (Brazil, Mexico).

In terms of the restructuring processes of the environmental authorities there has been an evolution of the structures and functions of the Convention's Focal Points.

There is a clear relationship between the way the Executive Power tackles the matter, the hierarchical position of the designated authority compared to the executive power (or within the respective Ministry) and the performance of the designated authority.

The influence over **promoting policies and coordinating inter-institutional** and inter-sectoral activities varies depending on the structure of the government (position of the unit in the Ministry of Environment hierarchy), as well as the value of the ministry itself. When the environmental authority is part of another ministry (planning, energy, science, development) there is a greater amount of coordination and better opportunities for integrating the issue of Climate Change into national policies. In all cases there is a scarce amount of coordination with local government: the decentralisation processes that were begun more than a decade ago have taken effect.

In general terms, countries with emerging economies that have suffered historically from air pollution problems in their large urban centres are those that have included the issue of Climate Change in their national agendas. This is also related to the total production of GHGs (which have increased in percentage and per capita when compared to the international situation). Exceptions to this tendency are Venezuelan, with the highest per capita rate in Central and South America and a rather unclear inter-sectoral policy, and Costa Rica which, although it does not have very high per capita pollution rates, decided to invest in an environmental policy that promotes the tourism sector and assures the sustainability of its natural resources in the medium and long term.

Instruments

The Focal Points are a requirement of the Convention to be able to implement actions related to Climate Change such as national communications, GHG emission inventories, strategies and plans for national Climate Change action.

The **national communications**, the **GHG emissions inventories and the national action plans and strategies** for Climate Change are the reporting instruments that have been established by the UNFCCC as part of the commitments made by all the countries. These tools are strictly for reporting purposes, and not for monitoring or planning.

All 18 countries have presented their first national communications. Mexico has managed to present reports every five years. Argentina, Brazil and Uruguay have presented their second reports, and numerous countries are currently drawing them up (Venezuela).

It has been more difficult for some of the 18 Latin American countries to bring their GHG inventories up to date. The main factors that limit their capabilities in this area are (i) the lack of systems to monitor climate, environmental and socio-economic data, and (ii) the limited knowledge of the focal points of how to apply the information and present and future climate scenarios (Table 4 and RIOCC[15]).

Table 5 shows the years when each country presented their GHG inventories. Most of the countries presented their GHG inventories in 1994. Mexico is the only country that presents its data at regular intervals.

Table 5 Years when the 18 Latin American countries presented their GHG inventories.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Bolivia	X				X				X		X		
Brazil	X	X	X	X	X								
Chile				X	X								
Colombia	X				X								
Costa Rica	X						X						
Cuba	X				X		X						
Ecuador	X												
El Salvador					X								
Guatemala	X												
Honduras						X							
Mexico	X		X		X		X		X		X		X
Nicaragua					X								
Panama					X								
Paraguay	X				X								
Peru					X								
Uruguay	X				X				X		X		
Venezuela										X			

2.1.2. The Kyoto Protocol

Representation for the Kyoto Protocol

The **National Authorities that were Designated** (DNAs) for the Kyoto Protocol are the organisations that are authorised to present carbon trading projects to the designated entity. There have been different focuses for developing the structure of the DNAs in relation to the Climate Change Directorates and/or Units.

The DNAs in Latin America can be summarised in the following way:

1. **Single entity model**: the secretary of the DNA performs the function of promoting the CDMs and their approval. At times this also includes other typical functions performed by the Climate Change authorities, such as identifying national and/or sectoral policies and strategies related to Climate Change and keeping records of GHG emissions (Chile, El Salvador, Guatemala, Nicaragua, Paraguay and Uruguay).
2. **Two-entity model**: in the two-unit model, regulatory functions are assigned to the department in charge of Climate Change, whereas their promotion is carried out by another entity. Costa Rica and Peru coordinate their activities through a private entity, whereas Argentina, Bolivia and Ecuador rely on a public structure that is part of the dependencies of the Ministry itself. A committee may provide assistance with regulatory and promotional functions in order to avoid conflicts of interest.

15 RIOCC - Ibero-American Network of Climate Change Offices, October 2006, Document to analyse the adaptation to Climate Change in Ibero-America.

3. **Inter-ministerial model**: all of the departments of governmental institutions related to Climate Change are involved by means of a (public or mixed) committee. The National Authority heads up the process. The Mexican Committee for Projects for the Reduction of Emissions and the Capture of Greenhouse Gases – made up of seven Secretaries of State and presided over by SEMARNAT – is an example of this model.
4. **Subcontracted services model**: DNA services may be tendered out to an independent agency that evaluates and approves projects to be communicated to the government agency which, in turn, presents the formalities to the designated entity.

A process to "re-engineer" the DNAs has been seen in several countries. This has occurred when there was a desire to combine Climate Change and sustainable development policies, when the environmental authority changed its structure or when the DNA's structure did not allow sufficient scope to be obtained.

Guatemala started off with a two-unit structure and an inter-ministerial committee, but the structure was radically reduced to a single entity model. In Paraguay, a large DNA made up of two units only survived 6 months due to a lack of resources. The opposite was seen in Costa Rica: this country started with a single institution, but a second private entity was created in 2004 to assure economic sustainability. Mexico and Brazil opted for the inter-ministerial model. Panama's DNA was the first Latin American entity to be established as a private organisation.

Clean Development Mechanism

The purpose of the CDM is to help the Non-Annex I Parties to the UNFCCC achieve sustainable development and to contribute to the Convention's ultimate aim, as well as helping the Parties that are included in Annex I to comply with the quantities of GHG emissions that they committed to limit and reduce as defined in the Kyoto Protocol.

The effectiveness of the DNAs depends on government policies and the extent to which the private sector is culturally available. The DNAs that have managed to promote CDM projects at a public and private level have restructured themselves to move out of the governmental sphere, seeking partnership solutions with the private sector to promote and implement CDMs. With the exception of Paraguay, Venezuela, 366 CDM projects recognised by the UNFCCC are currently in operation[16].

The two graphs show the percentage distribution of CDM projects by type (large and small), and the other nations that participated in these projects.

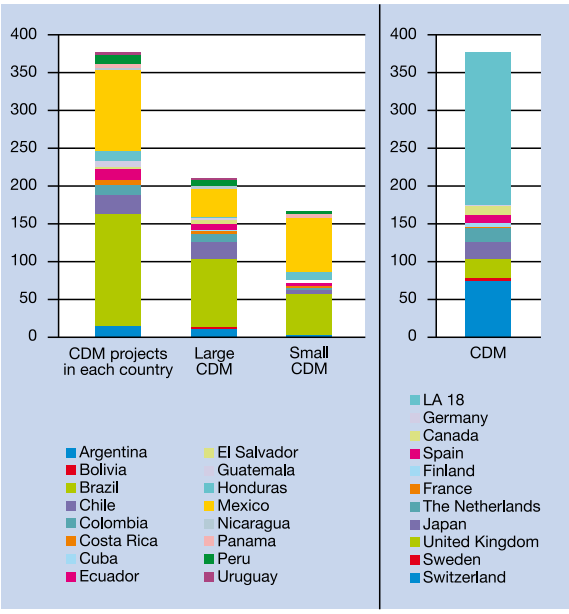

Figure 3 Percent distribution of CDM projects implemented with UNFCCC in November 2008 and partner countries in the implementation.

16 The data used in this section was taken from the UNFCCC website (http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php), last updated in November 2008. This data does not include projects that are currently being carried out with other entities like the World Bank, or that have been implemented with national funds. For this reason, the number of projects mentioned for each country may be less than the number of projects described on the websites of the DNAs. However, the task of confirming the information has been made difficult by the fact that not all of the institutions have a transparency policy for the activities that they carry out on this subject, or their economic resources do not allow them to keep their websites up to date.

2.2. National Development Agendas in Latin America

2.2.1. National issues and regional priorities

The questionnaires have made it possible to identify the national and regional problems, as perceived by Latin American countries.

Table 6 Table summarizing the main problems identified in the questionnaires.

Country	National priority issues	Regional priority issues
Argentina	Mitigation and adaptation	REDD, solid waste management
Bolivia	REDD, adaptation	REDD, adaptation
Brazil	Deforestation and desertification	Deforestation and desertification
Chile	Environmental education, Mitigation and adaptation, International Relations	n/a
Colombia	Adaptation and mitigation	Adaptation and mitigation at the level of ecosystems like "Páramo" and "coastal areas"
Costa Rica	Mitigation and adaptation	Mitigation and adaptation
Cuba	Soil degradation, forest coverage loss, pollution, biodiversity loss, water shortages	Idem, plus strengthening of institutions for early warning of extreme events
Ecuador	Mitigation and adaptation	Deforestation avoidance, Technology Transfer
El Salvador	Economic and social impacts of the effects of Climate Change, Identification of ecosystems critically vulnerable to Climate Change	Institutionalisation of the convention
Guatemala	Adaptation: health, food security, water resources, infrastructure protection, REDD	Restoration and management of ecosystems and remaining forest areas. Strengthening of social management for Climate Change mitigation and adaptation
Honduras	Adaptation	Institutionalisation of the convention
Mexico	Mitigation and adaptation, state financing and planning of climate action	Adaptation, deforestation, creation of resources and development of national communication
Nicaragua	Adaptation of agricultural systems; All other issues	All issues
Panama	Mitigation and adaptation	Adaptation
Paraguay	Aid in implementing National Climate Change Plan	n/a
Peru	Adaptation, mitigation, REDD	Adaptation and mitigation
Uruguay	Adaptation	No response
Venezuela	Biodiversity; climate change, public education campaign; effective protection for existing protected areas	Cooperation/coordination; monitoring, evaluation and information systems

Central America

At a national level, Central American countries perceive **adaptation to Climate Change** as the principal problem and see that:

1. Agriculture and food security are among the areas most severely affected.
2. Water resources are threatened by Climate Change.

1. Agricultural and food security

This is due to a number of factors, including: (i) the geographical vulnerability of the region; (ii) the social and cultural vulnerability of the rural population[17]; (iii) the low level of response by institutions to both immediate and long term problems.

Seasonal variability, droughts, flooding and other extreme events are already taking place and have been for the past decade, and most of all in the past five years[18], with severe effects on both subsistence and commercial agriculture.

Both in the past and in the present, most Central American countries have drawn up risk assessment plans to identify areas susceptible to flooding. This information is only used to manage evacuations in the case of extreme climatic events.

Meteorological information concerning climatic variability is also used for purposes relating to agriculture and food security. In several Central American countries, cooperation agencies and organisations that coordinate emergency humanitarian activities have classified regions in terms of their susceptibility to various extreme climatic events. Such analyses are conducted at a national level, and sometimes at a local or sub-local (micro) level. This information makes possible an efficient early warning system and the coordination of efforts to support affected individuals, but without identifying long term prevention and adaptation activities. The records are difficult to access, and such efforts are often associated with limited-duration cooperation projects or programmes

El Salvador expresses the need to implement socio-economic impact studies in order to evaluate its most vulnerable ecosystems. This country has already participated in a regional plan of action to identify solutions for Climate Change adaptation in collaboration with two other Central American countries, Cuba and Mexico. The project, coordinated through several institutions, made possible the evaluation of the vulnerability level of a number of river basins, laying a methodological framework for similar future studies[19]. By means of this project, and another undertaken with Canadian cooperation, the country was able to cover the most critical areas within its national territory[20].

2. Water resources

The analysis of the impact and vulnerability to climatic events in Central American shows that water resources are threatened by Climate Change. Information relating to access to potable water demonstrates that the service has low availability, and that countries are not responding to one of the Development Goals most closely related to the wellbeing of their people.

The region's social vulnerability with respect to water is very high in countries such as El Salvador and Nicaragua (with access to water amongst inhabitants of rural areas standing at 68% and 63% respectively, but with substantial improvements in the past 5 years). In Honduras, between 2000 and 2006 access to potable water reached 71%, but maintenance and operation activities fell off. From 2000 to 2006 the country's sustainable access to higher quality drinkable water supplies fell to just 7% of the rural population. Similar problems affect Panama and Costa Rica, both of which have suffered a reduction in the past 5 years in their capacity to provide drinking water to urban residents.

There is also a structural vulnerability: usage rates for water resources are very high in Cuba and Mexico (21.05% and 19.01% - World Resource Institute WRI, EarthTrends, Environmental Information Databases), making the long term prospects for water resource access all the more bleak.

17 In past decades, Central American countries have passed through extended periods of civil war, stages in their history when groups of people were forcibly displaced or the active population ceased agricultural production. These past events have led to a progressive loss of traditional agricultural knowledge (such as techniques for adaptation to climatic variability) in regions that rely on subsistence agriculture of a very limited number of cultivars – crop strains that have slowly been replaced with low quality commercial stock that is poorly adapted to regional microclimates.

18 According to data from ECLAC (online statistical database), Central and South America have been struck by 40 extreme events in the past five years, twice as many as in the period 1991-95, four times as many as 1981-85, and eight times as many as 1961-65.

19 The project "Capacity Building for Stage II Adaptation to Climate Change in Central America, Mexico and Cuba – PAN 10-000-14290" was undertaken with the technical and economic support of the Global Environment Fund (GEF), of the Swiss Government, by the Water Center for the Humid Tropics of Latin America and the Caribbean (CATHLAC) and the UNDP. National authorities were given the received training on the evaluation of current and future vulnerability of high-priority sectors: water resources and agriculture. The adaptation strategy resulted from the systematisation and analysis of secondary information (municipal plans for the environment, development, and investment, as well as relevant project information, etc), provided by the various local governments involved.

20 Canada Climate Change Development Fund (CCCDF), Adaptation and vulnerability assessment in the Jiquilisco Bay Coastal Zone.

At the regional level, there has been interest in the "Institutionalisation of the Convention". In fact, the CCAD (Central American Commission for the Environment and Development), as the environmental representative of the Central American states at the UNFCCC, ratified the convention in 1993.

On the other hand deforestation is considered one of the main problems to solve, at both the national and regional levels. According to FAO regional data, between 1990 and 2005 Guatemala lost 17.5% of its woodland, equivalent to 7.5% of the country's total area. Even these data do little to highlight figures for the region as a whole (14.10%), with Honduras suffering the highest deforestation rate (37%). In this sense, mechanisms for Reducing Emissions from Deforestation and Forest Degradation (REDD) are an instrument that shows a new attitude within governments, with regard to loss of forest coverage and biodiversity.

South America

At a national level, South American countries also show that adaptation to Climate Change is an issue of national priority. Nonetheless, one notices a confused message with regard to the prioritisation of issues. Neither at a national nor at a regional level is it clear whether the actions that must be taken to improve their adaptation knowledge base and capacity ought to be undertaken according to geography (priority regions) or sector (water, change of soil usage, agriculture).

At a regional level, issues relating to deforestation and the natural degradation of resources are very important to Latin American countries, although they are experiencing lower deforestation rates than their Central American neighbours (8.2% versus Central America's 14.1%, even without taking into account Chile and Uruguay, which have actually increased their forest coverage by 5.6% and 66.4%, respectively).

Approval and implementation of REDD are identified as priorities. In fact, 10 South American countries will benefit from the the Forest Carbon Partnership Facility (FCPF) pilot initiative: Argentina, Bolivia, Colombia, Costa Rica, Guyana, Mexico, Nicaragua, Panama, Paraguay and Peru.

Finally, adaptation and REDD are the issues that are most discussed in international circles, in advance of the evaluation of the results of the Kyoto Protocol.

2.2.2. Examples from some Latin American countries

For Latin American countries, the Bali COP13 and the Poznan COP14 represent two important steps for including Climate Change on the **national agendas in the 18 countries**.

Mexico, with its National Strategy and Action Plan and its subsequent Special Programme for Climate Change, has become one of the first developing countries to set a specific target for carbon reduction, with a commitment to reduce their greenhouse gas emissions by half by the year 2050 in comparison to 2000 levels. This target can only be met if a multilateral system is established which has mechanisms of financial and technological support at an unprecedented scale, and if the international community is committed to reducing global emissions by 50% by 2050. The goal will be met by using clean and efficient technology like wind and solar energy. Mexico also plans to implement a domestic "cap and trade" system, which is now in the intital planning phases.

Cuba is playing a leading role in the management of climate information for preparation for emergencies in the Caribbean and Central America and it has implemented adaptation and mitigation actions, particularly in the forestry and water conservation sectors.

Costa Rica is one of the countries in Latin America with the lowest carbon economies. Their proposal is to achieve zero carbon emissions by 2021 by promoting their national agenda of "Peace with Nature". Together with Papua New Guinea, this country plays a predominant role in the coalition of countries with significant forest cover.

Panama included Climate Change actions both in its national agenda and in the work to extend the Panama Canal.

In its role as an intergovernmental organisation that represents the Central American countries, the **CCAD** drew up guidelines for actions required in the region, demonstrating their will (but not the capacity) to tackle the matter.

Colombia played a leading role in the promotion of REDD at the Bali COP.

Brazil recently announced its willingness to put a stop to trends of deforestation in the Amazon basin, through innovative mechanisms that ensure their sovereignty over natural resources. The National Action Plan for Climate Change that was presented a short time ago plans to reduce deforestation by 72% by 2017. The proposal is to prevent deforestation and make it possible to reduce emissions on a larger scale than that achieved by running project-based activities. Brazil intends to meet this ambitious target by enforcing laws and through land use planning and innovative policy instruments: a voluntary tropical rainforest fund managed by the Brazilian government and special agreements with the private sector to ensure that their raw materials do not come from recently deforested areas.

The signing of a "Joint Action Plan" between the EU and Brazil towards the end of December 2008 was an important step towards consolidating the dialog on environmental matters and Climate Change.

Ecuador's proposal of compensating the country to avoid oil being extracted from the Yasuni National Park, which was presented to the international community, is not only an innovative solution for tackling Climate Change, but also for protecting biodiversity and indigenous rights.

Traditional knowledge is the main way that **Peru** and **Bolivia** are adapting to climate variations. Both countries approved their National Strategies between 2003 and 2004, but their National Action Plans need to be improved and updated.

Argentina recently presented its second national report to the Convention.

Chile prepared and presented its National Action Plan on the 4th of December 2008. The plan seeks to reduce the country's vulnerability to the effects of Climate Change and to contribute to a global reduction of emissions. The plan calls for the creation of a national fund for biodiversity and Climate Change, the creation of two research consortiums for second-generation biofuels, and the strengthening of Clean Development Mechanisms as a tool for sustainable development the technology transfer.

Uruguay is one of the countries with the lowest carbon gas emissions, as a result of the positive mitigation results from a long-term reforestation policy. The rest of the countries require greater political commitment and technical support to reach a consensus for identifying their respective National Strategies and Action Plans.

2.2.3. Climate change indicators

Methodologies have still not been created to define a country's potential to face up to Climate Change. At the same time, identifying technical instruments for comparing information is no easy task either, especially when the countries in question are developing and do not have reliable and easily accessible monitoring systems.

National development programmes should strengthen a country's capacity to adapt to Climate Change and to reduce its greenhouse gas emissions in a profitable way (with an optimal cost-yield relationship) as set out in the Delhi declaration[21].

> *"To the greatest extent possible, national sustainable development strategies should include targets for climate change in key sectors such as water, energy, health, agriculture and biodiversity, and should be based on the results of the World Summit on Sustainable Development."*

The IPCC refers to **adaptation practices** as current adjustments or changes in the decision making environments which, in the end, will increase recovery capacity or will reduce vulnerability to Climate Change that has been observed or is expected[22].

Although development generally makes adaptation easier, the capacity for adaptation is closely linked to ecological, financial, governability, social, ethical and cultural factors.

The Climate Risk Index for the 18 countries shows that this process is still falling short of the mark and that the countries in this region have a high level of vulnerability. Nicaragua and Bolivia feature amongst the 10 most vulnerable countries. However, depending on the information available for the studies on climate risk, some mention Honduras as one of the most vulnerable countries in Central America.

21 The Delhi Ministerial Declaration on Climate Change and Sustainable Development, COPS, 2002.

22 Adaptation to Climate Change can be looked at from three points of view: (1) responses to current variability (that also reflect lessons learnt from past adaptations to historical climates); (2) medium and long term climate trends that have been observed; and (3) the planning that is anticipated as a response to long term Climate Change scenarios based on models. In addition, adaptation measures can be classified as proactive, reactive or ex-post.

Mitigation of Climate Change is a central feature on the agenda for development and the reduction of poverty. The early mitigation of greenhouse gas emissions will significantly reduce the need for future adaptation. In particular, the burden put on the poor[23] offers new employment opportunities and a healthier environment.

The UNFCCC's policy framework on the subject of Climate Change has four critical elements:

- a long-term goal to stabilise GHG concentrations in the atmosphere;
- a short term goal for developing countries to stabilise their emissions to 1990 levels before the year 2000;
- a principle of "shared but differentiated responsibilities", resulting from the fact that developing countries cannot be expected to take on the same obligations as developed countries; and
- opportunities to reduce GHG emissions with a more favourable cost-yield relationship, through joint implementation and clean development mechanisms.

Table 7 Climate Change risk indicators for the 18 LA countries and average losses recorded in human lives and PPP (Source: GermanWatch, 2009, *Weather-related Loss Events and their Impacts on Countries in 2007 and in a long term comparison – Table 10 Annual Climate Risk Index for 2007*).

CRI Assessment	Country	CRI Assessment 1998-2007	Average death rate	Average death rate per 100,000 inhabitants	Average total losses (Mill. US$ PPP)	Average GDP losses in%
73	**Argentina**	71,33	21,00	32,54	0,05	0,01
6	**Bolivia**	**13,42**	**131,00**	**646,46**	**1,38**	**3,9**
67	**Brazil**	70,00	71,00	63,10	0,04	0,00
109	**Chile**	92,83	10,00	0,04	0,06	0,00
61	**Colombia**	67,50	67,00	2,32	0,15	0,00
30	**Costa Rica**	39,42	18,00	105,31	0,40	0,23
46	**Cuba**	55,25	3,00	1402,94	0,03	1,12
141	**Ecuador**	119,75	0,00	0,09	0,00	0,00
52	**Guatemala**	61,33	16,00	20,06	0,12	0,03
33	**Honduras**	40,58	9,00	456,83	0,13	1,49
27	**Mexico**	31,08	109	4167.71	0,10	0,28
3	**Nicaragua**	**12,25**	**111**	**509,42**	**1,98**	**3,20**
100	**Panama**	97,92	2	0,24	0,06	0,00
114	**Paraguay**	123,83	0	0,08	0,00	0,00
60	**Peru**	56,33	35	33,45	0,13	0,02
42	**Uruguay**	51,17	6,00	66,08	0,18	0,18
120	**Venezuela**	98,00	5,00	1,36	0,02	0,00

23 A few studies that go into greater detail - such as the IPCC Fourth Assessment Report (2007), the UNFCCC's report on investment flows (2007), World Energy Outlook 2007 by the International Energy Agency (IEA), and Environmental Outlook 2008 by the Organisation for Economic Cooperation and Development (OECD) - have improved understanding of the viability and costs of reducing GHG emissions.

From a broader point of view, a country's capacity for environmental management can be estimated by using different point systems.

The Environmental Policies Index's points system[24] was chosen for the opportunity that it provides of increasing the possibility of partnerships between EU institutions and its level of accessibility and validity for all of the 18 countries.

The calculations are important for Climate Change policies, but they are not sufficient. Therefore, evaluations have been made of the institutional capacity of the countries for dealing with climate matters and the extent to which these matters have been incorporated into the design of government policies. The environmental index provides the opportunity to supply reference indicators as part of the project's process: the EUrocLIMA initiative will be mainly based on raising awareness amongst decision-makers about the importance of basing policy design on reliable sources of information.

Table 8 shows each country's physical, demographical and economic characteristics. The data is related to the general EPI and to the specific indices for climate and governability.

Table 8 Main characteristics of the countries that are being compared, showing economic and governability data and the EPI indicator (Source: Science Information Network (CIESIN), Colombia University, with the European Commission's World Economic Forum and Joint Research Centre (JRC), 2008. Governability from CAIT 6, data from 2007).

Country	2005 Population	Size	Population Density	Per capita GDP	Governa-bility	EPI	EPI-Climat
Argentina	38.747,15	2.736.296,00	1,3	13.652,41	41,6	81,78	82,26
Bolivia	9.182,02	1.069.133,70	1,3	2.579,16	27,6	64,69	61,32
Brazil	186.404,90	8.511.043,60	2,5	7.825,78	45,0	82,65	83,30
Chile	16.295,10	721.229,34	2,2	10.938,57	79,0	83,44	78,41
Colombia	45.600,24	1.141.177,03	5,4	6.886,04	36,4	88,30	87,15
Costa Rica	4.327,23	51.014,99	8,8	9.646,49	63,8	90,45	98,31
Cuba	11.269,40	111.198,91	24,3	4.100,00	24,8	80,74	64,51
El Salvador	6.880,95	20.278,94	77,7	4.775,52	24,2	77,20	88,54
Ecuador	13.228,42	256.270,64	7,9	3.981,58	44,6	84,36	80,09
Guatemala	12.599,06	108.523,47	29,0	4.150,21	31,2	76,65	80,16
Honduras	7.204,72	112.078,10	10,0	3.170,33	34,4	75,39	76,91
Mexico	107.029,40	1.943.058,29	8,7	9.967,30	43,4	79,80	71,49
Nicaragua	5.486,69	118.789,48	8,0	3.538,94	32,9	73,42	75,86
Panama	3.231,50	74.515,22	8,1	7.234,06	51,7	83,06	77,96
Peru	27.968,24	1.288.259,27	2,1	5.725,07	28,7	78,08	87,14
Paraguay	6.158,26	395.907,51	1,2	4.368,11	38,1	77,67	94,20
Uruguay	3.463,20	174.047,96	2,8	9.897,78	66,6	82,29	88,50
Venezuela	26.749,11	911.835,87	4,2	6.485,33	16,9	80,05	68,37
Total	**531.825,58**	**19.744.658,32**					
Mean			**37,12**	**6.606,81**	**40,6**	**80,00**	**80,25**

24 The Environmental Performance Index (EPI) was developed by the Yale Centre for Environmental Law and Policy (YCELP) and the Colombia University's Centre for International Earth Science Information Network (CIESIN), in collaboration with the Joint Research Centre (JRC). The EPI measures performance at a country level based on a common set of environmental policy goals that each country can be responsible for. The "Country Policy and Institutional Assessment" (CPIA) rates countries based on a set of 16 criteria grouped into four clusters: (a) Economic management; (b) structural policies; (c) social inclusion and equity policy; and (d) management of the public sector and institutions. These environmental criteria estimate the extent to which environmental policies strengthen the protection and sustainable use of natural resources and pollution management. Multidimensional criteria are required to estimate environmental sustainability (e.g. for water, air, waste, the management of protected areas, the management of coastal areas and the management of natural resources). The CPIA index was created by the World Bank to ensure balanced assessments. Members of the World Bank's personnel evaluate the policies of countries and institutions by completing a specific questionnaire. With the GEF's Resource Allocation Framework (RAF), GEF resources are allocated to countries based on their potential for generating global environmental benefits and the capacity of their policies and practices for successfully implementing GEF projects.

According to the EPI, Costa Rica (5) and Colombia (9) are included amongst the 10 countries with the highest indices of environmental performance, and Ecuador (22), Chile (29), Panama (32), Brazil (35), Uruguay (36), Argentina (38), Cuba (41), Venezuelan (45) and Mexico (47) are amongst the top 50 countries.

Table 8 shows the main indices that make up the EPI, along with the performance of sectors related to Climate Change: the climate, environmental health, effects of the air on the environment, the water environment, forests, the productivity of natural resources and agriculture.

The data that can be extrapolated from the EPI requires further analysis, taking into account the fact that very little correlation has been found (geographical and economic) between groups of countries. Discrepancies have been found in the Climate Index regarding per capita GHG emissions, with higher values for countries like Bolivia and Uruguay and lower values for Panama, Ecuador and Nicaragua.

On the other hand, the data show the vulnerability of biodiversity and aquatic ecosystems.

The Climate Change Performance Index (CCPI) is an instrument designed to improve the transparency of international environmental policies[25]. The CCPI refers to 3 countries in Latin America: Brazil, Mexico and Argentina. These three countries rank amongst those countries with a good level of performance, occupying positions 8, 14 and 18 respectively. However, none of these countries have been recognised as "very good": they are still not making sufficient efforts and the index excludes emissions that come from deforestation and land use.

25 The Index evaluates and compares the performance of climate protection measures in 57 countries, which are jointly responsible for 90% of global CO_2 emissions related to the energy sector. Its goal is to increase political and social pressure on any countries that, until now, have not taken actions to protect the climate and that have still not taken notice of the importance of this matter. The Climate Change Performance Index, 2009, GermanWatch, CAN-Europe.

2.3. Identifying Needs

2.3.1. Institutional

In general it is the countries that historically suffer air pollution problems in their major cities that have included the issue of Climate Change in their national agendas. This is related to a country's total GHG production (elevated in terms of percentage in comparison to the international situation and/or per capita). Venezuela is an exception to this tendency and has the highest per capita emission rate in South or Central America and yet with an intersectorial policy that lacks clarity. Costa Rica is another exception. Although its per capita rates are not high, the decision was made to invest in an environmental policy that promotes tourism and ensures the sustainability of its natural resources in the medium and long term.

In other countries Climate Change policies are not included in the national agenda. These countries have found it hard to meet the obligations imposed by the UNFCCC, particularly for the creation of a national strategy that requires, like national communications, a coordinated effort made by numerous institutions and a solid political commitment that goes beyond the support provided by international bodies.

Coordination amongst different institutions is accomplished when the Designated Authority has more power and resources, as shown in the table and in the country descriptions. The additional information that was analysed permitted an evaluation of which relationships exist with the authorities charged with the implementation of the activities, local and federal governments. Activities and experiences related to communication and awareness of Climate Change amongst different social and productive groups, as well as facilitation of adaptation activities, are very limited. Since 2004, the role of the authorities, supported by international bodies, has centered on the promotion of mitigation measures related to CDM projects and the rules necessary to gain access to the carbon market. In many cases, when these activities have worked, they have created problems with programmes relating to the study of Climate Change, evaluation of the most vulnerable sectors, identification of mitigation measures and awareness programmes targeted at civil society.

In this respect, more substantial activities have been undertaken, focused on the aspect of environmental education which permit mitigation of Climate Change: creating responsible citizenship, facilitating clean production, etc.

Cooperation agencies targeted their efforts at the same institutions, promoting the concentration of the knowledge-base in a single entity, susceptible to changes and restructuring, as has occurred and is occurring in many national environmental authorities.

"How could the current situation be improved", virtually all the institutions underlined the need for additional human and economic resources. Argentina and Colombia stressed the need to improve monitoring systems for climatological data. However, both countries have recently received technical and economic support to improve techniques for data collection and analysis.

Chile and Bolivia took a different standpoint, emphasising the need to increase political commitment to the implementation of activities aimed at fighting Climate Change. These two positions stem from two different situations: Chile seeks consensus in order to create a Ministry of the Environment and gain approval for an Environmental Plan for its capital. In Bolivia resolving social tensions through the integration of different movements and social minorities into the political, social and economic life of the country is the national priority. Both countries see the coordination of activities as another major obstacle.

2.3.2. Tools

Table 9 Evaluation of types of environmental profiles and monitoring systems in the 18 countries of Latin America.

Country	Country profile	Environmental monitoring
Argentina	yes	yes
Bolivia	partial	partial
Brazil	yes	yes
Chile	partial	partial
Colombia	yes	yes
Costa Rica	yes	no
Cuba	yes	yes
Ecuador	n/a	n/a
El Salvador	partial	yes
Guatemala	yes	n/a
Honduras	yes	no
Mexico	yes	yes
Nicaragua	yes	no
Panama	yes	yes
Paraguay	no	no
Peru	n/a	n/a
Uruguay	n/a	n/a
Venezuela	yes	n/a

Table 10 Needs for studies identified by the 18 countries.

Need for additional studies	Country
Vulnerability studies at national and local level.	**Costa Rica, Guatemala, Nicaragua, Mexico**
Studies on technological needs and potential for technology transfer/development.	**Colombia, Mexico**
Study on profitable sector-based mitigation activities, evaluation of collateral beneficiaries in the instrumentation of adaptation and mitigation measures.	**Costa Rica, Mexico**
Studies on adaptation of key economic sectors.	**Guatemala, Mexico**
Long term projections with different kinds of mitigation.	**Bolivia, Mexico**
Hydrometeorological and satellite studies to predict Climate Change.	**Argentina**
UNFCCC and Kyoto Protocol instruments.	**Cuba, Paraguay, Peru, Uruguay**

Argentina, Brazil, Colombia, Cuba and Mexico are the countries that manage and maintain a system for constant monitoring of their environmental data. The other countries ("partial", "n/a") have up-to-date studies (as is the case in Peru[26]), but their actions were supported by international agencies or, as in the case of Bolivia, sector-based projects undertaken by bilateral partnership agencies were cited as environmental studies, at times leading to duplication of efforts and resources.

None of the respondents mentioned a system for monitoring Millennium Development Goals, in which reference was made to various sources of data on the environment and rating of social vulnerability. In this area, ECLAC made a joint effort with several environment ministries to identify indicators related to the MDGs, and offered technical support for monitoring. There was also little mention of the environmental monitoring systems available to the public through websites or from regional organisations such as CCAD or MERCOSUR.

The types of study required, apart from the case of Argentina, are instruments to guide decisions made by national authorities in the short and medium term (see Table 10). It is noteworthy that four countries asked for support in completing the decision making instruments required by the UNFCCC or the Kyoto Protocol, a fact that highlights the institutions' acceptance that they lack resources and/or capacities.

Regarding weaknesses in coordination and implementaton opportunities (see Table 11), most noteworthy are the problems in international dialogue and dialogue between the central government and individual states (particularly those most affected by deforestation). The need to improve coordination amongst donors. The importance of respecting the sovereignty of countries, preferring activities implemented through their governments.

The importance of establishing sector-based dialogue on the environment and Climate Change, in particular the issues of biodiversity, forests and international governability. The challenge of finding the best manner of applying CDMs and the new REDD projects soon to be launched by the World Bank.

26 The UNDP recently published GEO Perú, a report including numerous social, economic and environmental indicators, related to the Millennium Development Goals.

Table 11 Final evaluation of weaknesses in coordination and opportunities for project implementation.

Country	Coordination weaknesses	Priority projects	Problems
Argentina	Amongst donors	No data	No data
Bolivia	Between institutions	REDD, adaptation	No data
Brazil	National and international levels	No data	No data
Chile	Between institutions	No data	No data
Colombia	No data	No data	No data
Costa Rica	No data	Adaptation and mitigation plans	Lack of financial resources
Cuba	Amongst donors	Adaptation and mitigation plans	Lack of financial resources
Ecuador	No data	No data	No data
El Salvador	No data	Adaptation and mitigation plans	Lack of financial resources, technology transfer and knowledge/skills
Guatemala	Between institutions	No data	Lack of knowledge and coordination with other sectors
Honduras	No data	No data	No data
Mexico	No data	Implementation of adaptation and mitigation policies; state plans for climate action	No data
Nicaragua	Between institutions	Adaptation and mitigation plans	Lack of knowledge and coordination with other sectors
Panama	No data	No data	No data
Paraguay	No data	MDL	Lack of knowledge of CDM and REDD
Peru	No data	No data	No data
Uruguay	No data	No data	No data
Venezuela	Policy	Coordination	No data

Conclusion

Uncertainty associated with the temporality of Climate Change's long term impact is still a factor in political decisions to prioritize the issue of Climate Change and insert it into development plans.

In general, it was observed that the level of knowledge on Climate Change necessary to carry out the process of integration of adaptation as an issue in each sector's programme is still limited. A more useful aid in increasing acceptance, particularly for those Environmental Authorities that are still having problems managing the planning and decision making techniques stipulated by the UNFCCC, has been a locally-focused initiative aimed at adaptation over the medium and short term.

There are great expectations in terms of the support that Latin American countries will receive in facing the problems of adaptation, for which reason vulnerability evaluation is crucial for political dialogue on the issue. Though it is not possible to carry out all vulnerability evaluations through cooperation, discussions relating to the necessity and possibilities must be started amongst the relevant institutions.

The integration of Climate Change's potential risks is fundamental in planning and implementing development cooperation, not only due to the need to facilitate cooperation, but also to help countries relate to it.

Mitigation measures are only a high priority for those countries that have historically suffered problems with environmental pollution. CDM projects represent a mitigation technique that has been successfully integrated into the public and private sectors of other Latin American countries, as well as helping to create an environmental conscience. Expectations are even higher in the field of REDD and the leadership role that Latin American countries could hold within the group of other countries selected to implement projects with World Bank funding.

In other countries where Climate Change policies are not included in the national agenda, meeting the obligations stipulated by the UNFCCC has been a major challenge, particularly when it comes to the creation of a national strategy. Like national communications, this requires a coordinated effort by numerous institutions, as well as a level of political commitment that goes beyond the support provided by international bodies.

Annexes

Annex 1 Questionnaire on Climate Change

1. EUrocLIMA Questionnaire

This information has been compiled on the basis of questionnaires sent to all Latin American countries.

INDEX

1. Analysis of the problems	
National contributions to the causes of Climate Change	
Known effects of Climate Change at a national and regional level	
Vulnerabilities	
Conclusions	High priority issues at a national level
	High priority issues at a regional level
2. Institutional context	
Relevant ministry	
Relevant departments, composition and human resources	
Coordination between institutions	
Institutional organisations	
International commitments regarding Climate Change and the environment	
Legislation of the sector	
Legal instruments to control/counteract environmental degradation	
Conclusions	Taking ownership of Climate Change issues
	Current capacities and future perspectives
	Institutional problems
3. Regional/National strategies and policies for the sector	
Evaluation of national development strategies undertaken, and insertion of the issue of Climate Change	
Evaluation of national environmental strategies undertaken, and insertion of the issue of Climate Change	
Evaluation of regional development strategies undertaken, and insertion of the issue of Climate Change	
Evaluation of regional environmental strategies undertaken, and insertion of the issue of Climate Change	
Evaluation of national and regional studies about Climate Change and the Environment	
Conclusions	Additional studies
	Environmental monitoring system
	Interrelation of strategies for Climate Change and sustainable development
4. Actors	
Who are the interested parties at a national level? Public organisations, civil society, the private sector, scientific institutions/universities, conservation/environmental funds	
Who are the regional/international interested parties? International organisations and agencies	
Conclusions	How can these actors be coordinated?
	Which organisation should have its role accentuated?
	Problems identified: coordination, synergies, lack of data?
5. National/regional actions	
Activities financed by the European Commission (since 2002)	
Activities financed by member states (since 2002)	
Activities financed by other international agencies/organisations(since 2002)	
Conclusions	What possibilities for coordination/synergy exist?
	What types of programme/project can be financed?

2. Analysis of questionnaire results

The questionnaires are composed of 5 sections which cover most of the issues related to Climate Change, and are addressed, through the Delegations, to the UNFCCC's designated focal points. The final part of each section requests information relating to the key problems that the country and/or institution has found in facing Climate Change, and any guidelines for problem solving.

Section 1

- Analysis of the problems
- What are the priority issues to deal with at a national level?

The two questions were analysed together, to determine the national capacity of each country to relate to neighbors with shared borders. The result of this section is presented in Section 2.2.1. of the report.

Section 2, 3 and 4

The analysis questions of the sections relating to "institutional context", "national sector-specific policies and strategies" and "social actors" have been analysed jointly, apart from questions relating to studies and environmental monitoring systems.

- How is the government taking ownership of the issue of Climate Change?
- What is the current institutional capacity to address the problem of Climate Change?
- National/regional sector-specific policies and strategies?
- Are Climate Change strategies integrated with sustainable development policies, and if not, how can they be integrated?
- How are the different social actors coordinated?

With the aim of providing an overview of activities undertaken by national authorities, information relating to institutional structures has been revised, and certain elements added, suc as the evaluation of compliance with commitments acquired by the Parties relating to the UNFCCC and the Kyoto Protocol.

Section 5

In section 5, not all EU Member States have sent information (see Annex 3 for more information).

Annex 2 Country Fiches

EuropeAid

Argentina

International Commitments

United Nations Framework Convention on Climate Change ratified in 1994 by Law 24.295.

Kyoto Protocol, on September 28, 2001 through Law 25.438.

Legal Structure

Decree 2213/2002 appointed the Secretary of the Environment and Sustainable Development (SAySD) as the Enforcement Authority for Law 24.295.

To coordinate these responsibilities, Ministry of Social Development Resolution 56/03 established the Climate Change Unit, now called the **Office of Climate Change** (DCC), as part of the Department of Environment and Sustainable Development's Sub-department of Sustainable Development Promotion.

Under the DCC is the Permanent Secretary of the **Argentine Office for Clean Development Mechanisms** (OAMDL), established through Decree 822/98. Under the Sub-department of Sustainable Development Promotion, the Unit for Sustainable Energy Development (UDES) and the Environmental Risk Assessment Unit (UERA) coordinate actions with the DCC.

Functions

Office of Climate Change

1. Advising the National Director of Sustainable Development Management in all aspects related to the implementation of Law 24.295 and the UNFCCC.
2. Proposing and fostering actions to achieve the objectives and targets of the UNFCCC, which include implementing local awareness-raising actions to mitigate Climate Change.
3. Drafting and preparing guidelines for Climate Change policy for the National Director of Sustainable Development Management; identifying sectoral priorities for mitigation; determining national targets for potential emission reductions by sector; defining strategies and focal areas for mitigation activities by sector, in line with national sustainable development policies.
4. Coordinating the drafting of National Communications as part of the country's commitments under the UNFCCC.

OAMDL

Approving projects is the responsibility of the Argentine Office for Clean Development Mechanisms (OAMDL), the main function of which is to evalute the country's contribution to sustainable development through the CDMs that it implements. It is also responsible for establishing methodologies and procedures to identify, design and assess these projects; making recommendations for projects to be approved, identifying funding sources and establishing links with these sources.

The Executive Committee is headed by an official named by the Department of Environment and Sustainable Development and composed of officials from the following organizations: Department of Energy; Department of Agriculture, Cattle, Fishing and Nutrition; Departmant of Foreign Relations and the Department of Science, Technology and Productive Innovation. These representatives will have expertise in fields related to project activities. In this way it will be ensured that CDM projects are decided on with joint consensus and that they are in the country's best interest.

The Permanent Secretary will receive the Project Design Document (PDD) and ensure that the documentation presented is complete. The Permanent Secretary will also send the PDD to the Executive Committee and the Provincial Authority, where the project will be ratified. The Permanent Secretary will also carry out a technical analysis of the project.

As a final step, after the various offices have evaluated the project, it will be presented to the Department of Environment and Sustainable Development with a recommendation for approval or rejection. If it is approved, the Letter of National Approval will be granted to the project's sponsor confirming that it will contribute to sustainable development and that it is being carried out in a voluntary manner, leaving open the international request for the cycle of a CDM project.

FAC (Carbon Fund of Argentina)

The FAC, which was created by Decree 1070/05, is responsible for the promotion of CDM programmes and projects. This Fund exists under the auspices of the Department of Environment and Sustainable Development. Its objective is to facilitate and provide incentives for the development of CDM projects.

The FAC's strucutre and operating standards have been defined based on the document entitled "Options for the operations of the Carbon Fund of Argentina", which was drawn up in the framwork of the World Bank's CF-Assist.

UDES - Unit for Sustainable Energy Development:

1. Enable the formation of a national commission for inter-ministerial coordination with the Department of Energy and of Science and Technology; this commission shall design and oversee a national, environmentally sustainable energy development programme.
2. Proposing joint lines of action at an inter-ministerial level to foster the development of a national energy matrix for the coming decades that favours energy generation and the use of fuels with low environmental impact.
3. Assimilating government environment-energy policies and designing projects that reflect these policies. Convening internal and external working groups to focus on high priority environmental studies.
4. Establishing mechanisms for technical-environmental training in national, provincial and municipal public sectors and private sectors involved with energy generation, distribution and use, including fuels used for long-distance transport.

UERA - Environmental Risk Assessment Unit:

1. Establish a methodology to asses the environmental baseline.
2. Confirm the baseline as requested by the competent authorities and parties.
3. Advise SAyDS on the technical aspects of designing proposals for contracting insurance and establishing and implementing restoration funds and the instrumentation under their control, if applicable.

UAAI - The International Environmental Affairs Unit is responsible for overseeing Argentina's environmental strategy in regional and international arenas, promoting and coordinating international agreements and processes and coordinating international environmental policy.

Human resources

DCC – 6 staff; UDES – no data; UERA - 8 staff; UAAI – no data; OAMDL – no data.

Training

The objective of training within the DCC is creating public awareness (potential supporters, NGOs, government authorities, etc.). It also focuses on media relations and training.

National Coordination

The actions of adaptation and mitigation require the participation of different areas and levels of national, provincial and municipal public administration, of the scientific and technological communities and of civic society.

The implementation of policies and actions in the fight against Climate Change is fundamentally the task of the Office of Climate Change (DCC) of the Secretary of the Environment and Sustainable Development (SAySD).

In various manners, considering the fact that the number of intiatives related to the mitigation of and adaptation to Climate Change requires the active participation of other actors, different working channels have been established.

- National Advisory Commission for Climate Change is made up of representatives from varous state agencies. They meet monthly with the main aim of facilitating participatory processes and synergies between the different areas of national government and of integrating mitigation and adaptation initiatives into the planning of different sectors and/or systems.
- National Commission of Science-Technology: composed of universities and scientific and technological institutions, who meet monthly with the aim of integrating R&D initiatives into the policies and measures being carried out by state agencies.

The DCC also works together with civil and society and the provinces, in the latter case mainly through the Federal Council of the Environment (COFEMA).

International Coordination

In this context Argentina is committed by its own initiative to joining the international community in Climate Change mitigation and adaptation initiatives. This commitment is reflected in:

1. Active participation in the current negotiation process and the creation of the Kyoto Convention and Protocol. On two occasions Argentina hosted the COP;
2. Ratification of the Kyoto Convention and Protocol;
3. Participation of Argentinean representatives in various work groups and organs of the KP, the Convention and the Intergovernmental Panel on Climate Change;
4. Presentation of the First and Second National Communication, including the National Inventory of Greenhouse Gases;
5. Contribution to intiatives parallel to Kyoto, which have focused on reducing GHGs;
6. Implementation of specific advanced intiatives, which are the main development focus of this work.

Climate Change policies

The confrontation of the problem at a national level includes five major components: 1) Generation of information, 2) Adaptation, 3) Mitigation, 4) International negotiation and 5) Training.

Adaptation Mechanisms coordinated by SAySD

Project Proposal for Early Warning of Drought, Mitigation and its Effects.

Weather reports in fighting forest fires.

Environmental Risk Insurance Systems.

Mitigation Mechanisms

Transportation

Control of polluting gases, noise and parasitic radiation from cars, Decree 779/95.

Law of Transit and other regulations on mass public transport, N. 24449.

Energy

Environmental Impact of hydraulic works for energy generation, N. 23879.

National Law on Nuclear Activity, N. 24804.

National Programme for Rational and Efficient Energy Use, Decree N. 140/2007.

Strategies to promote renewable energies (RE) and energy efficiency (EE) are currently being formulated.

Waste

Law of Household Waste, Minimum Funding for Environmental Protection for Comprehensive Household Waste Management, N. 25916.

Forests

Law of Forests, Minimum Funding for the Environmental Protection of Native Forests, N. 26.331. Approved in 2007, regulation is pending.

CDMs - Clean Development Mechanisms

Approved CDMs

Since 2005, Argentina has obtained approval for 15 projects, 11 on a large scale and 4 on a small scale, including one agricultural project.

REDD (Reduction of Emissions from Deforestation and Degradation)

Regarding REDD and the conservation and sustainable management of forests, Argentina emphasises that this issue should be an essential aspect of the global agreement to be forged in Copenhagen, underlining the potential role that can be placed in the mitigation of GHGs and in sustainable development. The issues discussed and decisions taken should be based on the principle of common but differentiated responsibilities, taking into consideration the implications that could be involved in the sustainable development of countries.

The efforts realized by the countries to reduce emissions resulting from deforestation and forest degradation should be countered with the help of sufficient financial resources and other positive incentives from developed countries. These funds should not simply be given out when developing countries reduce their deforestation rates, rather a spirit of cooperative action should be fostered on a large scale, as this could lead to the successful achievement of common goals as well as to the sharing of risks involved in the process.

Bolivia

International Commitments

United Nations Framework Convention on Climate Change signed in 1992 and ratified through Law of the Republic N. 1576 in 1994.

Kyoto Protocol ratified through Law of the Republic N. 1988 in 1999.

Legal Structure

The ministry responsible for Climate Change matters is the **Ministry of Water and the Environment**, created by Supreme Decree DOE 07/02/09. The UNFCCC focal point is the **Vice-ministry of the Environment, Biodiversity and Climate Change**.

The **National Climate Change Programme** (PNCC) and the Office of Clean Development (ODL) are the government institutions responsible for identifying and implementing Climate Change policies. The PNCC includes the following focal areas: (i) Training, Awareness Raising and Education, (ii) Programme for Mitigation and Adaptation Projects, (iii) National Adaptation Plan, (iv) Baseline Initiative, (v) Strengthening Research Capacities, (vi) Health and (vii) Traditional knowledge.

Functions

PNCC - The National Climate Change Programme is responsible for (i) formulating policies and implementing actions on Climate Change matters, managing resources, adaptation actions and international trade for the CDM, (ii) identifying and implementing national action plans; (iii) GHG inventories; (iv) conducting studies on Climate Change impact and adaptation measures; (v) evaluating GHG mitigation options; (vi) providing information on the issue at all levels; (vii) identifying economic support available for projects and (vii) REDD actions.

The Clean Development Office (ODL) is part of the PNCC and has the following functions: (i) improving institutional capacities for effective participation in the CDM and other GHG trading schemes; (ii) implementing programmes and projects for GHG mitigation alternatives coherent with the PND and in the GHG framework; (iii) create easy-to-access information to raise awareness and train all social actors on the CDM and other GHG emission trading schemes.

Human resources

PNCC: 20-25 staff.

National Climate Change Strategy

In 2007 the National Climate Change Adaptation Mechanism and the Climate Change Mitigation Strategy were approved. Actions are implemented or coordinated through the PNCC and are focused on forestry projects and, to a lesser degree, on hydroelectricity.

National Coordination

The PNCC is the instrument through which different ministries coordinate actions. A new National Committee on Climate Change is currently being created under the President of the Republic. Coordination is undertaken for the purpose of implementing the National Climate Change Adaptation Mechanism (MNACC) and the Climate Change Mitigation Strategy. The PNCC includes inter-institutional cooperation framework agreements for Climate Change work with the Ministry of Health and the Ministry of Water and the Working Group on Environmental Services. Its actions are focused on exchanging and generating information, facilitating training for environmental services and designing projects.

International Coordination

The PNCC works together with the Andean Community (CAN) and the Iberian-American Network of Climate Change Offices (RIOCC). The CAN Secretary General's Office is working on formulating and structuring the Andean Strategy on Climate Change, which will lay the foundation for sub-regional cooperation on priority issues amongst Andean nations with regard to the UNFCCC and the KP. Bolivia belongs to the COP group of Forested Countries. In 1994, the country signed Memoranda of Understanding with Holland, Spain, Canada and Austria to facilitate CDM project initiatives.

Brazil

Adaptation Mechanisms

Rules for Environmental Prevention and Control – Analysis of Risks and Contingencies (Law N. 2140).

National Water Basin Programme.

Incorporation of Risk Management into the National Planning System (SISPLAN).

Mitigation Mechanisms

Forests

The Forestry Law (N. 1700) has introduced the concept of sustainable forest management without effectively confronting the problem of deforestation.

Law (N. 1715) created the National Institute of Agrarian Reform. Law (N. 3545) of Community Renewal defines basic standards for the use and distribution of land and state forest concessions.

CDMs - Clean Development Mechanisms

It is not believed that these can be the main mechanisms in the fight against Climate Change. A better participation by all countries has been proposed in the framework of the United Nations.

Approved CDMs

Approval of the national implementation of the CDM was enacted in Law 1333. In Bolivia, 2 large CDM projects are being implemented, with an estimated emission reduction of 224,371 m³ton/year.

REDD/FCPF

Yes.

International Commitments

United Nations Framework Convention on Climate Change, ratified in 1994.

Kyoto Protocol, ratified in 2002.

Legal Structure

The Ministry of Foreign Relations is the focal point for the Convention.

The **Inter-ministerial Commission on Global Climate Change**, in the Ministry of Science and Technology's General Coordination Office on Global Changes in Climate, is the Designated National Authority for the Kyoto Protocol (DE of 7-7-1999, modified with DE of 10-1-2006).

The **Inter-ministerial Commission on Global Climate Change** (established through DE 6.263, dated 21-11-2007) is the entity responsible for enacting Brazil's national and international policies. The National Congress' **Special Joint Commission on Climate Change** (created through Joint Act 1/2007), seeks to accompany, oversee and enforce Climate Change actions in Brazil.

The **Department of Climate Change and Environmental Quality** (SMCQ) is the authority charged with preparing national Climate Change policies. The creation of the Department of Climate Change and Environmental Quality (SMCQ) occurred with the restructuring of the Ministry of the Environment in 2007. In 2008, under the **Department of Climate Change** (DEMC), two new entities were created, the **Office of Energy and the Environment** (CEMA) and the **Office of Climate Change and Sustainability** (CMCS), replacing the former Energy and Climate Change Nucleus.

The **Executive Group on Climate Change** is responsible for drafting and implementing the National Climate Change Plan, developed by the government.

The **Foro Brasileño de Cambios Climáticos** (Brazilian Climate Change Forum) (DE N. 3.515 dated June 20, 2000) seeks to "raise awareness and mobilize society to discuss and make decisions" on the impacts of gas emissions from human activity that intensify the greenhouse effect.

The **Centro de Previsión del Tiempo y Estudios del Clima** (Centre for Weather Forecasting and Climate Studies, CPTEC/INPE), associated with the Ministry of Science and Technology, is one of the main institutions responsible for investigating Climate Change, and will coordinate the **Red Brasileña de Investigación sobre Cambios Climáticos Globales** (Brazilian Network for Global Climate Change Research, Red CLIMA), created by MCT in late 2007.

Red GEOMA was created by MCT in 2002 and its members include leading research institutions in the Amazon.

Functions

The responsibilities of the Inter-ministerial Commission are to: (i) issue opinions as required on proposed sectoral policies, legal instruments and provisions related to Climate Change; (ii) support the Government's position at country-level negotiations; (iii) define additional eligibility criteria for CDMs and national sustainable development strategies; (iv) approve CDM projects; (v) coordinate actions with the private sector and civil society.

The Department of Climate Change (DEMC) is the unit responsible for the formulation, implementation and monitoring of national public policies related to protecting the global climate system and the ozone layer, in all matters related to the environmental area, in international negotiations linked with the UNFCCC and the KP. It is also responsible for developing mitigation and adaptation policies and strategies, coordinating these with Executive Group on Climate Change. The department promotes coordination with other areas of government, encouraging the use of environmentally sound alternative energies.

The responsibilities of the Red CLIMA are to: (i) generate and disseminate appropriate knowledge and technologies; (ii) produce data and information to support Brazil's diplomatic efforts in international negotiations; (iii) conduct studies on the impacts of Climate Change; (iv) study adaptation alternatives for social, economic and natural systems.

Human resources

DEMC: 16 staff.

National Climate Change Strategy

National Climate Change Plan – PNMC – BRASIL, 12/2008 - This Plan, based on the general guidelines of the National Climate Change Policy, proposed by the Executive to the Legislative Branch in Legislative Bill 3.535/2008, is organized into four focal areas: (i) mitigation; (ii) vulnerability, impact and adaptation, (iii) research and development and (iv) training and dissemination. The National Plan identifies seven objectives: The first three address mitigation issues for the energy sector (energy efficiency, alternative energy sources and biofuels); two propose actions to reduce CO_2 emissions with changes in land use. Of the remaining two objectives are focused on identifying national vulnerabilities and adaptation measures.

Studies

The Centre for Weather Forecasting and Climate Studies – CPTEC/INPE, is creating a regional Eta/CPTEC model for South America with the technical and financial support of the United Kingdom and Germany.

Red GEOMA was created by MCT in 2002 and its members include leading research institutions in the Amazon Region.

Major studies it has conducted include the following: The Coast, A macro-diagnosis of Coastal and Marine Areas; Vulnerabilities of the State of Rio de Janeiro coastline to Climate Change; Climate Change and Possible Alterations to Ecological and Socio-economic Systems in the Amazon; Global Climate Change and its Effects on Biodiversity; Climate Change and Possible Alterations in the Biomass of the Atlantic Forest; Climate Change and Energy Security in Brazil; Global Warming and the New Geography of Agricultural Production in Brazil; Mapping Urban Areas that are Vulnerable to Global Warming and the Greenhouse Effect; The Economy of Climate Change in Brazil – EMCB Project.

Mitigation Mechanisms

Transport

Biofuels: National Alcohol Program, PROALCOOL. In 1992 Brazil became the first country to use alcohol as a fuel additive. Law 11.727/08 promotes the sale of ethanol.

National Program for the Production and Use of Biodiesel, which assesses the regularity of biodiesel production, and which since July 2008 has obligated companies to increase the mix of biodiesel used in commercial diesel fuel from 2% to at least 3%.

Agriculture

Sugar cane, control of stubble burning and other cultural waste. There are disputes over the production of crops for food versus biofuels.

Productive Sector

Agreements with business groups: In July 2008, the Government signed three agreements with the private sector: The Moratorium on Soy Beans, the Pact with Pará Wood Producers and the Agreement with the Federation of Industries of the State of São Paulo. Protocols identifying measures to reduce commercial pressure on the Amazon region.

Energy

Law of Energy Efficiency (2001): The energy efficiency framework (Law 10.295, enacted in 2001), addresses the National Policy on Energy Conservation and Rational Use, establishing minimum energy efficiency requirements. 10-year Energy Expansion Plan – PDE 2007/2016.

Incentive Program for Alternative Source of Electricity (2004-09): promotes the introduction of renewable energies into Brazil's energy matrix through an auction system.

Brazilian Energy Labelling Program: promotes energy efficiency in equipment through the voluntary use of informative labels.

National Electricity Conservation Program (1985): promotes the rationalization of electricity production and consumption.

National Program to Rationalize the Use of Petroleum and Natural Gas Derivatives (1991): an incentive for the efficient use of petroleum and natural gas derivatives.

Forests and Water

Management of Public Forested Areas: Law 11.284/06 regulates the implementation of a forest concession system with an increase from 300,000 to 3 million ha of independently certified managed forests in the Amazon region and the creation of a Sustainable Forest District.

Public Forest Management Law, Law 11.287 of 2006.

An Action Plan to Prevent and Control Deforestation in the Amazonia Legal region: aimed at reducing the rates of deforestation through a series of integrated land and estate planning actions, monitoring and control and the promotion of sustainable productive activities.

DE N. 6321/07 sets out the actions to be taken to prevent, monitor and control of forests in the Amazon region (States of Pará and Rondonia, 36 municipalities with the highest deforestation rates).

The "Pro-Recuperation" line of credit, Law N. 11.775/08: a system of incentives for the regularisation and recovery of legally reserved areas and the permanent preservation of degraded areas.

The Public Forest Management Law to give transparency to forest management processes (DE N. 6.063/2007).

Amazon Protected Areas Programme: The second phase of this programme is aimed at creating 20 million ha of protected areas.

The establishment of minimum prices for the sale of forest products (Leguminosae caesalpiniaceae, moriche palm, caryocar brasiliense, babassu palm, etc), to support indigenous and forest communities, Law N. 11.775 from 17/09/08.

CDMs - Clean Development Mechanisms

Approved CDMs

Yes.

Carbon Fund

The National Climate Change Fund (Law N. 9478/1997) provides financial resources to implement the Climate Change policy and plan.

Pro-CDM – CDM project support programme: finances pre-investment and scientific-technological development projects associated with project activities in the field of CDMs for medium-sized and large businesses or consortiums of companies and cooperatives.

National Amazon Fund: Brazil has a Memorandum of Understanding with Norway for cooperation on environmental matters, including REDD and CDM projects.

Chile

International commitments

United Nations Framework Convention on Climate Change signed in 1992 and ratified in 1994.

Kyoto Protocol, signed in 1998 and ratified in 2002.

Legal Structure

The **Ministry of Foreign Relations** is the UNFCCC focal point, with the Department of the Environment, Antarctica and Maritime Affairs as the executive body. The **National Advisory Committee on Global Change**, created in 1996, is composed of representatives of the National Environment Commission, Ministry of Foreign Relations, Ministry of Agriculture, National Energy Commission, Gen. Directorate of Maritime Territory and the Merchant Marine, Meteorological Directorate of Chile, Hydrography and Oceanography Service of the Chilean Navy, National Commission for Scientific and Technological Research and the Chilean Academy of Sciences.

The **Comisión Nacional del Medio Ambiente** (National Environment Commission) (CONAMA) coordinates actions on Climate Change through the **Climate Change Unit**, which is part of the Research Department. It is also the Designated National Authority for CDM (2003).

The existing institutional structure is in the process of change: CONAMA is supposed to be raised to the level of a Ministry, however the process has not yet concluded.

National Strategy on Climate Change

The ENCC is coordinated around three axes: (i) adaptation to the impacts of Climate Change; (ii) mitigation of GHG emissions; (iii) creation and promotion of skills for Climate Change, all sub-divided into specific objectives. The strategy is supported by studies to be carried out on the socio-economic impact. The Action Plan for Climate Change was presented at the beginning of December 2008 (coinciding with COP14). Drafting of the Ozone Law (Law N. 20.096/2006).

National Coordination

Concerted, coordinated actions amongst the institutions involved with Climate Change are being established at the intergovernmental level, in the private sector and within civil society.

International Coordination

Through Mercosur.

Mitigation Mechanisms

Transport

Plan de De-contaminación y Prevención Atmosférica de la Región Metropolitana (Plan for Atmospheric De-contamination and Prevention in the Metropolitan Region) (PPDA) created in 1998 to solve the serious air pollution problem in Santiago by 2010.

Energy efficiency of goods transport since 2005.

Centro de Control y Certificación Vehicular (Centre for Vehicle Control and Certification) 3CV.

Energy

Consejo Nacional de Producción Limpia (National Council for Clean Production) CNPL.

Waste

National Policy on Solid Waste and associated Action Plan (2005).

Water

Programme for the Development of Secondary Norms on Water Quality.

Forests

Reforestation Plans.

CDMs - Clean Development Mechanisms

Approved CDMs

Chile has 26 CDM projects approved, of which only 4 are small. It is the sixth most important country in the world in terms of quantity of emissions absorbed.

Colombia

International commitments

United Nations Framework Convention on Climate Change, ratified in 1994 by Law N. 164.

Kyoto Protocol, signed in 1997 and ratified in 2000 by Law N. 629.

Legal Structure

The **Ministry of Foreign Relations** is the Focal Point for UNFCCC. The **Ministerio de Ambiente, Vivienda y Desarrollo Territorial** (Ministry of the Environment, Housing and Territorial Development) (MAVDT) through the **Oficina Colombiana para la Mitigación del Cambio Climático** (Colombian Office for the Mitigation of Climate Change) (OCMCC) coordinates the implementation of CDM. The **Instituto de Hidrología, Meteorología y Estudios Ambientales** (Institute of Hydrology, Meteorology and Environmental Studies) (IDEAM) is the body responsible for National Communications and monitoring Colombia's GHG.

Functions

OCMCC - The Colombian Office for the Mitigation of Climate Change performs the following functions: (i) develop instruments and skills for the due process of evaluation and approval of projects, complying with the requirements and criteria of KP; (ii) identify and develop the skills to promote a portfolio of high quality, competitive projects and advertise them; (iii) design, develop and implement a project marketing strategy. The purpose of these strategies is to identify, formulate and develop CDM projects and especially projects which provide significant social benefits, generating alternatives for overcoming poverty, the eradication of illegal crops and the demarginalisation of various sectors of the population of Colombia.

Human Resources

11 staff.

National Strategy on Climate Change

A policy document on Climate Change is currently being developed which will integrate the subject of Climate Change into the sectoral agendas of the country.

National Coordination

There is a high degree of coordination between MAVDT, the National Planning Department, IDEAM, the Parks Unit and other institutions of the Sistema Nacional Ambiental (National Environment System) (Sina). Coordination with other ministries occurs through the documents of the Council for Economic and Social Policy and the national environmental councils held twice per year.

Studies and publications

Annual Report on the State of the Environment and Renewable Natural Resources in Colombia, in 2004, IDEAM Report on the state of Natural resources and the Environment 2007-2008; National Strategy Study for the Implementation of CDM. Final Report, Bogotá, 2000; Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), First National Communication on Climate Change, Bogotá, 2001.

Presently the National Planning Department is carrying out a study like the Stern Review at a national level.

Costa Rica

International Coordination

The **Comunidad Andina de Naciones** (Community of Andean Nations) (CAN) supports its member countries in a variety of environmental matters, and is interested in generating an Andean strategy on Climate Change. Environmental department, with a staff of three.

Colombia participates actively in international Climate Change negotiations with UNFCCC, GEF, IDB, World Bank, UNEP, UNDP. The country has signed a memorandum of understanding with the Governments of Canada, The Netherlands and France.

'Jakarta Group'; this group includes the Environment Ministers of France, Germany, Australia, South Africa, Nigeria, China, Pakistan, India and Costa Rica, and proposes common actions with respect to Climate Change.

Mitigation Mechanisms

Forests

A law is being drafted for payment for environmental services.

Land use planning and Environmental Impact Studies

EIS The procedure for the granting and monitoring of environmental permits is regulated by Law 99 of 1993, Decree 1220 of 21 April 2005 and Decree 500 of 2006.

Since 2002 the Ministry of the Environment, Housing and Territorial Development (MAVDT) has led the progress of Evaluaciones Ambientales Estratégicas (Strategic Environmental Evaluations) (EAE), in order to incorporate environmental considerations into decision-making processes in the ambit of policies, plans and programmes.

Sustainable Development

Law 99 of 1993, which establishes the framework for action on the environment, takes as its basic principle the concept of sustainable development of the Rio declaration.

CDMs - Clean Development Mechanisms

REDD/FCCB

Yes.

International commitments

United Nations Framework Convention on Climate Change, ratified in 1994 by Law 7414.

Kyoto Protocol, signed in 1998, ratified in 2002.

Legal Structure

The **Ministerio de Ambiente, Energía y Telecomunicaciones** (Ministry of the Environment, Energy and Telecommunications) (MINAET), created by the Organic Law on the Environment, N. 7554, is the Authority responsible for national policies on Climate Change.

The **Comité Inter-ministerial en Cambio Climático** (Inter-ministerial Committee on Climate Change) (CICC) coordinates policies and strategies on Climate Change at the national and international level. In 2004, the **Oficina Costarricense de Implementación Conjunta** (Costa Rican Office for Joint Implementation) (OCIC) was created by Decree 31676 to be the focal point for UNFCCC and to act as DNA for CDM in representation of MINAET. The OCIC is structured as a directorate and an executive unit. On the operational level the technical unit is subdivided into one working group for the forestry sector and another for the energy sector.

The **Asociación Costarricense de Implementación Conjunta** (Costa Rican Association for Joint Implementation) (ASOCIC) is a body formed in 2002 to support the National Climate Change Programme, led by MINAE and consisting of private sector companies and government institutions including Oxbow, Fundecor, CNFL, Acore, ICE and CINDE.

The **Instituto Meteorológico Nacional** (National Meteorological Institute) (IMN) is a scientific body responsible for coordinating all the meteorological activities of the country and is a directorate ascribed to MINAE, coordinating directly with OCIC.

Functions

OCIC

The functions of the Directorate of OCIC are: (i) to coordinate and execute all actions and programmes tending to the formulation and approval of policies and projects for the mitigation of GHG in support of national sustainable development goals and their subsequent negotiation at an international level, (ii) to carry out the same actions in the field of mitigation, (iii) to facilitate the inclusion of the public and private sectors in such actions. The functions of the Technical Administrative Unit are (i) the drafting of a manual of procedures for the reception, evaluation, approval and monitoring of projects for the mitigation of emissions of greenhouse gases, (ii) the promotion of and consultancy for CDM projects (iii) the management of the portfolio of CDM projects and project approval.

ASOCIC

The functions of ASOCIC are to assist OCIC in the promotion and management of the portfolio of CDM projects, ensuring the economic sustainability of such actions through an internal fund-raising system.

Human resources

5 staff; the staff receives sporadic training from UNDP.

National Strategy on Climate Change

Since 2004, the institutional structure of Costa Rica has evolved to give greater weight to environmental matters and further integrate Climate Change into the country's sustainable development policies. The subject of Climate Change is positioned at the highest political level in the country and is included in the National Development Plan 2006-2010 (Peace with Nature). A National Law on Climate Change is being formulated. Costa Rica has a National Climate Change Strategy, with the active participation of the State, academia and the private sector. The Strategy includes four basic principles and five axes of action. The basic principles are: shared responsibility, opportunity, threat and the development of the skills and legitimacy for international involvement. The five axes of action are: 1) mitigation, 2) vulnerability and adaptation, 3) measurement, 4) skills development and technology transfer, and 5) education and awareness. Three committees were formed to draw up the ENCC and coordinate the National Climate Change Programme (inter-institution, programme and inter-sector).

National Coordination

Intergovernmental: yes.

Private sector: yes.

Civil society: yes.

International Coordination

Costa Rica has signed the Regional Agreement on Climate Change (Law N. 7513) with the CCAD. In the UNFCCC, together with Papua Nueva Guinea, it leads the Jakarta Group and has played a very active role in negotiating REDD.

Costa Rica has bilateral agreements for GHG reduction with USA, Switzerland, Mexico, Holland, Norway, the World Bank, Canada and Spain.

Adaptation Mechanisms

Regional studies: Adaptation of the water system of the north-western zone of the Costa Rica Great Metropolitan Area to Climate Change.

Mitigation Mechanisms

Transport

RECOPE has been obliged to eliminate the Use of Lead in Gasoline (DE 19088); Law on Traffic on Public Roads and its reforms L. N. 7331; Regulation for the Control and Technical Inspection of emissions of polluting gases produced by Automotive Vehicles (DE 28280); Addenda to the Regulation for the Control and Technical Inspection of emissions of contaminating gases produced by Automotive Vehicles (DE 29391); On the emission of contaminants (DE 30221-S); Regulation on the Emission of Atmospheric Contaminants from Boilers (DE 30222); Creation of the National Biofuels Commission (DE 33357); Law on Traffic on Public Roads (L 7331); Technical Regulations on Road Transport Hydrocarbons, Bulk Liquefied Petroleum Gas; Pressurised Recipients Portable Cylinders and Petroleum Products, Liquefied Petroleum Gases (Res. N. 152); National Biofuels Plan; Plan for fuel savings in the transport sector.

Agriculture

Register and examination of Equipment for the Application of Chemical, Biological, Biochemical or Similar Substances to any of the Above for Agricultural Use (DE 27037).

Energy

Public Sector Energy Savings Plans, Energy Sector Directorate, 2007.

Forests and Water

Agreement Law on Biological Diversity N. 7416; Organic Law on the Environment and its reforms, Law N. 7554; Forest Law and its reforms; National System of Conservation Areas, Law N. 7575; Law on Water Resources; Peace with Nature Initiative; Biological Biodiversity Strategy; National System of Conservation Areas; Payment for Forest Services (Payment for Environmental Services-PES); National Water Resources Plan; National Biodiversity Inventory; C-Neutral Norm; Coastal Marine Strategy; Water Resources Policy; Regulation on Waste Water and Discharges (DE 26042-S-MINAE).

Cuba

CDMs - Clean Development Mechanisms

Approved CDMs

Costa Rica's portfolio includes approved projects, concentrated in the electricity sector.

Environmental Funds

The Conservation Fund for the Development of Sinks for the Deposit of Greenhouse Gases (DE 25067-MINAE, 1996) has never become fully operational. The National Fund for Forest Financing supports small and medium producers in the sustainable management of forest resources through various economic measures. The Forest Law contemplates the principle that the polluter pays, through article 69. As support for a compensation programme, it is intended to devote 1/3 of the amount raised by the selective consumption tax on fuels and other hydrocarbons to forest compensation programmes, new plantings and GHG mitigation.

REDD/FCCB

Yes.

Costa Rica is often considered to be a "case-study" due to its policies of paying for environmental services and the effectiveness of its policies for the protection of forest resources. The following should be mentioned in connection with the success of its DNA: political support, processes oriented towards national priorities, use of market instruments, compatibility between the national agenda and "good practices" in Climate Change, costs and environmental effectiveness.

International commitments

United Nations Framework Convention on Climate Change, signed in 1992, ratified in 1994.

Kyoto Protocol, signed in 1998, ratified in 1999, in effect since 2005.

Legal Structure

The **Ministerio de Ciencia, Tecnología y Medio Ambiente** (Ministry of Science, Technology and the Environment) (CITMA) is the UNFCCC focal point, and together with the **Instituto de Meteorología** (Institute of Mterorology) (INSMET), it coordinates the Grupo Nacional de Cambio Climático (National Group on Climate Change) (GNCC) which brings together the ministries involved (Energy and Mines, Land use, agriculture, foreign relations, transport, fishing, construction, water resources) academic institutions and NGOs.

Functions

The GNCC is responsible for producing the second National Communication. There is no unit directly responsible for climate matters, but actions are carried out jointly by all the institutions involved. Climate Change is dealt with by the Unit for Clean Production and Sustainable Consumption.

National Strategy on Climate Change

The ENCC has not yet been drafted, however there is a National Environmental Strategy 2007-2010 which includes quantitative indicators and goals, which are systematically checked by CITMA.

The UNDP/CIDA and UNDP/GEF have produced two works for adaptation to Climate Change.

Ecuador

National Coordination

Very high levels of coordination, with systematic impact at a local level, at least in terms of adaptation measures and collecting meteorological data.

Adaptation and Mitigation Mechanisms

Agriculture

MINAGRI, National Programme for the Production of Organic Material - Urban solid waste.

Energy

National Programme "Energy Revolution".

Waste

MINAGRI, Community Directors (Urban solid waste).

Forests and Water

National Programme for Soil Improvement and Conservation; Nacional Programme for the Struggle against Desertification and Drought (2003); National Strategy for Environmental Education; National Fund for the Environment; National Fund for Forest Development; National Action Plan 2006/2010 on Biological Diversity.

Risks

Directive N. 1 of the National Headquarters for Civil Defence "For the planning, organisation and preparation of the country for disaster situations".

CDMs - Clean Development Mechanisms

Approved CDMs

Cuba has one CDM project approved, for the recon-version of a gas distribution system in collaboration with Canada.

Excellence in the prediction of hurricanes and management of early warning systems for hurricanes and other extreme events.

International commitments

United Nations Framework Convention on Climate Change, ratified in 1994.

Kyoto Protocol, ratified in 1999.

Legal Structure

By Executive Decree 1815, issued on 1 July 2009, Climate Change mitigation and adaptation was declared a State Policy, and the Ministry of the Environment of Ecuador (MAE), was named the institution in charge of plans and strategy for implementing inter-institutional actions and measures in the fight against Climate Change. This decree also granted the National Directorate of Climate Change, Production and Sustainable Consumption (DNCCPCS) of the Ministry of the Environment all powers, functions, representation and delegations specifically linked with the National Climate Committee (CNC-1999), the primary authority of Climate Change coordination at the national level. This Directorate is now the governmental entity in charge of Climate Change adaptation and mitigation initiatives, integrating the component of production and sustainable consumption, given their importance in promoting civic consciousness and awareness in the production and industrial sectors of the suitable use of natural resources.

Functions

The functions defined by the DNCCPCS with respect to Climate Change are as follows: (a) Comply with the functioning of the Designated Nation Authrity, which reports to the Executive Board of the UNFCCC; (b) Coordinate the formulation of policies and strategies for Climate Change internally and externally; (c) Promote measures that serve to strengthen national resources for adaptation to Climate Change; (d) Promote measures that serve to reduce the net emission of greenhouse gases; (e) Determine the criteria of promotion, evaluation and monitoring of CDM projects; (f) Evaluate and carry out monitoring of the approvals of CDM projects; (g) Coordinate and review national criteria and positions in international negotiations in conjunction with other state organisations; (h) Promote the implementation of strategies and measures for clean production sustainable consumption.

Human resources

From 1996 to 2006, the issue of Climate Change was supported strongly through numerous projects, most notably: CAF-Programa Latinoamericano del Carbono (Latin American Carbon Programme) (PLAC); UNITAR, UNEP/Risø's Project CD4CDM, UNEP. In addition, through the Carbon Finance Assist Program, the World Bank has supported activities related to the promotion of CDMs.

In 2009 the support was re-emphasized and significantly increased, as the issue of Climate Change has been given much more importance in the government's agenda. In addition to the activities carried out directly by the National Directorate of Climate Change, Production and Sustainable Consumption of the Ministry of the Environment, support also comes from the Global Environment Fund (GEF); the United Nations Program for Development (UNDP), the United Nations Program for the Environment – Regional Office for Latin America and the Caribbean (UNEP/ORPALC) and the World Bank, among other organizations. These bodies provide assistance in the carrying out such current Climate Change projects as the Second National Communication, the Adaptation to Climate Change Project (PACC) through effective management of water in Ecuador, and the Project for the Adaptation to the Impact of the Accelerated Recession of Glaciers in the Andean Tropical Region (PRAA).

Mitigation Mechanisms

Energy

By Executive Decree 475, 2007, the Ministry of Electricity and Renewable Energy was created, which through the Sub Office of Renewable Energy and Energy Efficiency is implementing a plan to change the energy matrix and to promote energy efficiency through 2010.

Forests

Strategy for the Sustainable Development of Forests, Increase of Carbon Forest Reserves (Reforestation) and the Conservation of Forests, through the monitoring of forests and such programs as SocioBosque (SocialForest).

Water

Norms for water pollution and the establishment of parameters and acceptable values for the quality of water and its various uses.

CDMs - Clean Development Mechanisms

Approved CDMs

Up to July 2009 a total of 25 projects had been approved and/or confirmed in the Clean Development Mechanism. The promotion of and improved access to this market constitutes a priority of President Rafael Correa and his government for the country. For this reason the DNCCPCS of the Ministry of the Environment has been promoting the application of the Clean Development Mechanism in the public and private sectors (including the forestry sector) to diversify the portfolio of projects and to position Ecuador on the global market.

REDD

SocioBosque Programme

SocioBosque (Social Forest) is a protection program for forests, the main aim of which is to protect forests and their ecological, economic and cultural values, to reduce deforestation rates and greenhouse gas emissions and to improve the living conditions of poor people. It has a goal of conserving over 3 million hectares of native forest land, high plateaus and other native vegetal formations in Ecuador by providing economic incentives to farmers and indigenous communities to voluntarily help conserve and protect these forest resources. The SocioBosque project is being carried out in the framework of the REDD initiative as a mechanism of the distribution of benefits, and is already in operation as part of the country's preparation for the future implementation of REDD.

Other Mechanisms

Yasuní-ITT Initiative

The Yasuní - ITT proposal or model is an innovative initiative in which Ecuador proposes to leave around one billion barrels of petroleum from the ITT field underground and thus promote the conservation of nature, the protection of biodiversity, social development, guaranteeing the rights of peoples in voluntary isolation who liv in Yasuní Part (Tagaeri and Taromenane), the implementation of renewable sources of energy and the avoidance of the release of around 407 million tons of CO_2 into the atmosphere. In this way Ecuador is voluntarily contributing to global objectives of reducing GHG emissions. The Yasuní-ITT initiative also proposes the implementation of an integrated policy for the conservation of terrestrial and marine ecosystems, especially the conservation of moorland and mature forest as natural carbon sinks, and in this sense it forms part of the great challenges of the Multi-Year Development Plan 2007-2011, in the chapter on the environment.

El Salvador

International commitments

United Nations Framework Convention on Climate Change, signed in 1992, ratified in 1995.

Kyoto Protocol, signed in 1998, ratified in 1998.

Legal Structure

The Ministerio de Medio Ambiente y Recursos Naturales (Ministry of the Environment and Natural Resources) (MARN) is the National Focal Point for the UNFCCC and Intergovernmental Panel on Climate Change (IPCC), and the Designated National Authority for the KP.

Functions

Monitoring compliance with Climate Change commitments from international treaties.

Create and oversee the application of a National Climate Change Plan and of national inventories of greenhouse gases.

Integrate Climate Change in the strategic environmental evaluation and in the environmental code to be incorporated into all government policies, plans and programmes, as well as in the risk studies that form part of environmental impact studies. Ensure that Climate Change is integrated into national and regional territorial development plans, by incorporating in these plans programmes and measures for mitigation (reduction of emissions) and adaptation (prevention and reduction of climate vulnerability).

Within the framework of the Government Programme 2009-2014, MARN has adopted Climate Change mitigation and adaptation as a priority policy, which includes different strategic guidelines linked to the policies of risk reduction and sustainable land management.

Human resources

Within MARN there are 4 officials responsible for overseeing the application of the UNFCCC and of the KP and financed by the government's budget. Three of these officials carry out work at a technical level and another works in the political field as an advisor on the issue of Climate Change.

At the technical level, two officials work full time, one dedicated to the issue of adaptation to Climate Change and the other to the issue of mitigation, including the mechanisms of flexibility, which for now is limited to CDM. Within the climate prediction unit of Meteorological Services, one expert works part time focusing on observation of the climate, its variability and changes. The political advisor oversees international, inter-institutional and intersectoral aspects of the issue, including the application of the UNFCCC and KP, as well as the orientation and technical oversight of the institutional team.

Financing

Every year the government of El Salvador designates part of the national or municipal public budget to the payment of the amounts necessary to finance the UNFCCC and the permanent or temporary public officials who focus on oversight of this instrument and the KP.

In this context El Salvador has obtained financing to comply with several of its commitments, such as the creation of national communications and the execution of projects supporting national inventories of greenhouse gases, evaluations of vulnerability and climate impacts, the analysis of mitigation alternatives in different sectors and sources of emissions, and proposals for policies, plans, programs and measures related to the issues of mitigation, adaptation and technology transfer.

National Climate Change Plan

Within the framework of the current 2nd National Communication, a National Climate Change Plan is being developed, in accordance with the mandate derived from the Environmental Law. For these purposes all the previous required studies as well those complementary to the information generated in the framework of the 1st National Communication and from other related initiatives are being developed.

The National Plan of Climate Change will set guidelines for the national portion relating to regional climate change strategy, currently in the initial stages of creation.

One of MARN's priority work strategies is inter-institutional sustainable environmental management, which is being implemented in various parts of the country. Along these lines initiatives related to the issue of Climate Change will be integrated in both the fields of mitigation and adaptation, with consulting, discussion and planning at the level of political decision-making and by means of interdisciplinary work teams. Both these aspects are to be inter-institutional in nature.

International Coordination

El Salvador is part of the UNFCCC and KP. In this capacity it participates directly in multilateral Climate Change activities. Together with UN agencies, bilateral and multilateral organisations, environmental NGOs, associations of native peoples, municipal associations, scientific entities (such as the IPCC and other centres of research and technological development), it coordinates its actions internationally with those of other Parties and agents involved in these multilateral processes, which are geared towards observing the processes of Climate Change and supporting and facilitating actions taken by the Parties.

Guatemala

Within the multilateral process, the country is an active member of the Group of 77 developing countries and China, and of GRULAC and GRUCA. El Salvador is also a member of RIOCC, within which Ibero-American initiatives are discussed, which are then raised at the Ibero-American Forum of Ministers of the Environment and at the Summits of Ibero-American Heads of State.

At the level of the Central American region, within the system of Central American Integration (SICA), as part of its formal structure, a Regional Committee on Climate Change has been established. Here the regional dimensions of the issue are to be discussed and technical support is to be provided in carrying out the political decisions of the Central American Council of Ministers of the Environment and Development (CCAD).

Adaptation and Mitigation Mechanisms

Currently the relevant components for the development and creation of the National Climate Change Plan are being created, which includes the following:

(a) Incorporation of both issues in environmental legislation

(b) Adoption of a policy of mitigation and adaptation in the 2009-2014 Government Programme

(c) Adoption of strategic guidelines in compliance with MARN's vision within the framework of the 2009-2014 Programme

(d) National mitigation measures in the context of the nation's sustainable development

(e) Innovation and technological development for mitigation and adaptation

(f) National Plan of Action for Climate Change

(g) Incorporation of Climate Change in the policies, plans and programs of the central and municipal governments.

CDMs - Clean Development Mechanisms

Approved CDMs

El Salvador has 5 major CDM projects approved, with Canada, Holland and Japan.

International commitments

United Nations Framework Convention on Climate Change, signed in 1992, ratified in 1995.

Kyoto Protocol, signed in 1998, ratified in 1999, in effect since 2005.

Legal Structure

The **Ministerio de Medio Ambiente y Recursos Naturales** (Ministry of the Environment and Natural Resources) (MARN) is the national authority for both commitments. The Unidad de Cambio Climático (Climate Change Unit) (PNCC) was established in 2001 on conclusion of the activities of Phases I and II of the First National Communication on Climate Change. In 2003, through Ministerial Agreement 134-2003 the National Climate Change Programme was created (PNCC) as the specialized Climate Change Unit.

MARN is overseeing the creation of the Presidential Committee on Climate Change, composed of an Inter-ministerial Committee, a Technical Council and by Ad Hoc Working Groups.

Functions

The functions of PNCC are: (i) analysis of Climate Change and global warming, (ii) studies of carbon fixing and making use of CDM, (iii) technical and scientific support for the institutions responsible for areas affected by Climate Change (forests, water resources, basic grains, health), (iv) participation in risk and early warning activities related to activities in climate variation, global warming and Climate Change.

Human resources

6 staff.

Since 1997 the staff have received technical and financal support from international organisations and bilateral cooperation, however more training is required.

National Strategy on Climate Change (ENCC)

The ENCC guidelines are in preparation. The PNCC has drafted two plans for adaptation of two of the country's priority river basins (drought and flooding) and has estimated greenhouse gas levels for the years 1990 and 2000.

National Coordination

Coordination with the different sectors is carried out by specially formed working groups.

Honduras

International Coordination

The directorate of the PNCC is part of the Climate Change Technical Committee of the CCAD and the technical focal point for the UNFCCC.

Adaptation and Mitigation Mechanisms

Transport

Under analysis.

Agriculture

National Policy for Integrated Rural Development, 2006, general impact studies of Climate Change.

Energy

From 2008, MARN has demanded compensation for GHG emissions coming from central electricity generators which generate electricty by fuel combustion.

Forests and Water

Creation of the Water Resources and River Basins and Environmental Quality Units, Accord Min. 239-2005.

Regulation of Discharge and Re-use of Waste Water and Disposal of Sludge, Min. Accord N. 236-2006; PINFOR Programme of forest incentives, Resolution 02.12.2004.

Risks

Declaration of the Amatitlán, Villalobos and Michatoya River basins as high-risk sectors, Governmental Accord N. 179-2001.

Human rights

Human rights and Climate Change, Resolution 7/23.

CDMs - Clean Development Mechanisms

Approved CDMs

Guatemala has 6 projects approved, 2 of them large projects.

International commitments

United Nations Framework Convention on Climate Change signed in 1992, ratified in 1995 by Decree N. 26-95.

Kyoto Protocol, signed, ratified in 1999 by Decree N. 37-2000, in effect since 2005.

Legal Structure and Functions

The Secretary of Natural Resources and the Environment (SERNA) is the Designated Authority for relations with UNFCCC and KP. The **Climate Change Unit** is the operational body within the Secretariat, while the **CDM Unit for the energy sector**, ascribed to the Dirección General de Energía (General Energy Directorate) (DGE), is responsible for the evaluation and promotion of CDM projects in the energy sector; amongst its functions are the formulation, coordination, execution and evaluation of policies related to the protection and use of renewable and alternative energy sources.

The **Programa Nacional de Cambio Climático** (National Programme on Climate Change) (PNCC), as a project managed with funds from GEF, has prepared its first National Communication. The Programme is now preparing the Second National Communication. It participated in the preparation of the project Development of Skills for Stage II of Adaptation to Climate Change in Mexico, Central America and Cuba, which ended with the publication of two documents "Strategy for Adaptation to Climate Change and Action Plan for the Aguan River Basin in Honduras" and "Current vulnerability of the Aguan River Basin in Honduras Part I".

México

Human resources

4 staff.

National Strategy on Climate Change

SERNA, the Mario Molina Centre, the Clean Air Institute, the WB and the UNDP organized a Workshop to review the Project of the first Plan Nacional de Gestión de la Calidad de Aire (National Air Quality Management Plan) (PNGCA), with the support of CIDA.

National Coordination

Coordination is organized according to the issue to be addressed with the other secretaries of state, the academic sector, NGOs, private companies, COPECO etc. There is an inter-institutional technical committee to look into the issue with other secretaries of state such as: Finance, SAG, ICF, Health, SMN and the Academic sector.

International Coordination

International Coordination is carried out with and through CCAD.

CDMs - Clean Development Mechanisms

Approved CDMs

Honduras has 14 projects in execution, all small; the sector with most representation is hydro-electricity.

International commitments

United Nations Framework Convention on Climate Change, signed in 1992 and ratified in 1993.

Kyoto Protocol, signed in 1997 and ratified in 2000.

Legal Structure

The **Secretaría de Medio Ambiente y Recursos Naturales** (Secretariat for the Environment and Natural Resources) (SEMARNAT) is the body responsible for "leading national policies on Climate Change" (Art. 32 Bis, para. XVI, Organic Law of Federal Public Administration, 2003). The Sub-secretariat of Environmental Planning and Policy of SEMARNAT, through its General Directorate of Climate Change Policies, fills the role of Secretary General of the Intersecretarial Commission on Climate Change.

The object of the **Comisión Intersecretarial de Cambio Climático** (Intersecretarial Commission on Climate Change) (CICC), created in 2005 and permanent in character, is to coordinate the actions of departments and other entities of the Federal Public Administration relating to (i) the prevention and mitigation of emissions GHG and (ii) adaptation to the effects of Climate Change. The CICC is made up of the serving Secretaries of State of the Environment and Natural Resources; Agriculture, Livestock, Rural Development, Fishing and Food; Communications and Transport; Economy; Social Development; Energy; and Foreign Relations. Its mission is to coordinate the actions of departments and other entities of the Federal Public Administration relating to the formulation and implementation of national policies for the prevention and mitigation of emissions of greenhouse gases, adaptation to the effects of Climate Change, and in general to promote the development of programmes and strategies of climate action relating to compliance with the commitments signed by Mexico in the United Nations Framework Convention on Climate Change (UNFCCC). The Secretary of Finance and Public Credit is a permanent guest member at meetings of the Commission. The possibility is now being studied of incorporating other Secretaries of State, including Public Educación and Health, into its work on a permanent basis. The ex-oficio president is the Titular head of SEMARNAT. The deputy president is the Subsecretary of Environmental Planning and Policy of this Secretariat, who is also responsible for the Technical Secretariat of the Commission, through the Dirección General Adjunta para Proyectos de Cambio Climático (General Directorate for Climate Change Policies) (DGAPCC).

The CICC has four Working Groups: (i) GT-PECC, **Grupo de Trabajo para el Programa Especial de Cambio Climático** (Working Group on the Special Programme on Climate Change); (ii) COMEGEI - **Comité Mexicano para Proyectos de Reducción de Emisiones y Captura de GEI** (Mexican Committee for Projects for the Reduction of Emissions and the Capture of GHG); (iii) GT-INT - **Grupo de Trabajo sobre Asuntos Internacionales** (Working Group on International Issues); (iv) GT-ADAPT - new - **Grupo de Trabajo sobre Adaptación** (Working Group on Adaptation). All the member Secretaries take part in these Working Groups, except the COMEGEI in which the Secretariat of Foreign Relations does not take part.

C4 - **Consultative Council on Climate Change** is a permanent consultative body of the CICC made up of 23 specialists from the academic, social and private sectors.

Instituto Nacional de Ecología (National Ecology Institute) (INE): Institute responsible for the generation and distribution of knowledge and information through applied scientific research and skills strengthening, to support the formulation of environmental policy and decision-making.

In February 2005 the SENER (Secretary of Energy) created the **Energy Sector Climate Change Committee**, a coordination mechanism for the monitoring, analysis and definition of policies and activities related to Climate Change and CDM in the Energy Sector. The Committee includes the participation, amongst others, of representatives of Comisión Federal de Electricidad (Federal Electricty Commission) (CFE), Petróleos Mexicanos (Mexican Petroleum) (PEMEX), Luz y Fuerza del Centro (Central Light and Power) (LyFC), Comisión Reguladora de Energía (Energy Regulation Commission) (CRE); Comisión Nacional para el Ahorro de Energía (National Commission for Energy Saving) (CONAE); Instituto de Investigaciones Eléctricas (Electricity Research Institute) (IIE); Instituto Mexicano del Petróleo (Mexican Petroleum Institute) (IMP); and the Fideicomiso para el Ahorro de Energía Eléctrica (Trustee for Electricity Saving) (FIDE).

The **Programa Mexicano del Carbono** (Mexican Carbon Programme) (PMC) is made up of 21 Research and Teaching Institutions and 5 State research institutions and its mission is to coordinate research work relating to the human dimension, aquatic and terrestrial ecosystems and the atmosphere.

The **Mexican GHG Programme** is coordinated by SEMARNAT and the Comisión de Estudios del Sector Privado para el Desarrollo Sustentable (Commission on Private Sector Studies for Sustainable Development) (CESPEDES), with the technical support of the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The programme has an Advisory Committee which includes the Confederación de Cámaras de la Industria (Confederation of Chambers of Industry) (CONCAMIN) and the National Ecology Institute (INE). The programme is also supported by the Global Opportunities Fund of the British Foreign Office and the British Embassy in Mexico, as well as USAID.

The **Fondo Mexicano de Carbono** (Mexican Carbon Fund) (FOMECAR) is a technical assistance fund which arose from the joint initiative of Mexican institutions in order to support the business community and public sector bodies in the country in carrying out projects under CDM and other mechanisms to promote sustainable development. FOMECAR finances training activities for companies on CDM projects, organizing workshops for drafting pre-projects, technical assistance on the viability of a CDM project, advice for obtaining financing for a CDM project, payment for the PIN and/or Project Design Document, advice on the sale of carbon bonds or Certified Emission Reductions.

Mandate

CICC - Amongst the functions of the Intersecretarial Commission on Climate Change are: (i) Formulate, and submit for the consideration of the President of the Republic, national Climate Change policies and strategies for incorporation into the corresponding sectoral programmes and actions; (ii) Promote and coordinate the implementation of national strategies on climate action and coordinate their implementation in the respective areas of competence of federal departments and entities; (iii) Promote the carrying out and permanent updating of the actions needed to comply with the objectives and commitments of the UNFCCC; (iv) Function as the DNA for effects relating to UNFCCC; (v) Formulate national positions to be adopted in respect of related international fora and organisations; (vi) Revise the design documents of projects for the reduction and capture of GHG emissions whose developers wish to be registered with the CDM of KP and expedite the corresponding Letters of Approval; (vii) Promote in the private and public sectors, and in the competent bodies of the three orders of government, the development and registering of projects for the reduction and capture of GHG emissions; (viii) Systematize scientific, technical and climate action information and distribute it nationally, including an annual public report on progress made by Mexico on this issue.

Working Groups

GT-PECC - The Working Group on the Special Programme for Climate Change, coordinated by the Sub-secretary of Environmental Planning and Policy of SEMARNAT, brings together the information for the Annual Public Reports on Climate Action of the CICC. It coordinated the formulation of the document Hacia una Estrategia Nacional de Acción Climática (Towards a National Strategy on Climate Action) (HENAC), published at the end of November 2006, as well as the Estrategia Nacional de Cambio Climático (National Strategy on Climate Change) (ENACC), which the President of the Republic presented publicly in May 2007. The Special Climate Change Program was publicly announced by the President of the Republic on June 5 and will be published in 2009.

COMEGEI - The Mexican Committee for Projects for the Reduction of Emissions and the Capture of GHG functions as the DNA for CDMs. Amongst its attributes is the responsibility for identifying opportunities, and facilitating and approving projects, for GHG reduction.

GT-INT - The Working Group on International Negotiations is coordinated by the Secretary of Foreign Relations, through the General Directorate for Global Issues. This group supports the intersecretarial concertation of the positions which Mexico presents in international fora, particularly in the Conferences of the Parts of the UNFCCC and its subsidiary organs.

GT-ADAPT - is the group responsible for proposing cross-sector adaptation policies and strategies to the CICC. The members of this group worked to draft the adaptation component of the Special Programme on Climate Change 2008-2012, created from the ENACC.

INE - Coordination of the Programme on Climate Change. The functions of INE are to carry out research into Climate Change in Mexico, both for mitigation and adaptation, within Sectoral and Institutional Programmes and those acquired through UNFCCC: (i) periodically update the national GHG inventory, both sources and sinks. (ii) prepare National Communications (iii) carry out methodological studies for the mitigation of GHG in the energy and forest sectors; analysis of climate variation and Climate Change; (iv) carry out methodological studies to evaluate vulnerability and options for adaptation to Climate Change; (v) develop future emissions scenarios; (vi) carry out studies on side benefits from reducing the combustion of fossil fuels in cities and promote the development of cleaner technologies. The INE also functions as the focal point for the Intergovernmental Panel on Climate Change.

CONAFOR – The National Forest Commission is a decentralized body of the Secretariat for the Environment and Natural Resources, the objective of which is to develop, promote and provide incentive for productive activities in the field of forest conservation and restoration. It also participates in the formulation of plans and programs and in the application of the policy of sustainable forest development. CONAFOR is responsible for the national policy of the reduction of emissions for deforestation and forest degradation and contributes to the country's position on this issue, in coordination with three other bodies, such as the National Commission on Knowledge and Use of Biodiversity (CONABIO), an inter-secretarial commission created in 1992 on a permanent basis.

PMC seeks to coordinate scientific activities related to studies done in Mexico of the carbon cycle, to function as Mexico's scientific counterpart to similar programmes in other countries, to develop and promote scientific research on the carbon cycle in the country, and to systematize scientific information on carbon.

GEI-México - The GEI (GHG) México Programme is a voluntary national programme to account for and report Greenhouse Gases (GHG) and to generate emissions reduction projects. The programme arose from a private initiative as a response by the industrial sector to adopt voluntary actions to combat Climate Change. The GEI México Programme focuses on two aspects: (i) Company inventories of emissions of greenhouse gases and (ii) Promotion of projects for GHG emission reductions.

Human resources

SEMARNAT, responsible for handling the area from a technical angle. Approximately 15 staff in the areas mentioned above. INE, responsible for handling the area from a scientific angle.

National Strategy on Climate Change

Since 2006 (Presidency of Felipe Calderón) the issue of Climate Change has been designated as a priority in the national agenda. In May 2007, the Intersecretarial Commission on Climate Change (CICC) concluded the National Strategy on Climate Change, and based on this strategy it prepared a Special Programme on Climate Change 2009 – 2012 (PECC), in the framework of the National Development Plan 2007 – 2012. The subject of Climate Change was included for the first time in this Plan, in Directing Axis 4 devoted to Environmental Sustainability, thus demonstrating that the Government of Mexico recognizes that the impact of GHG emissions is becoming ever more evident. The PECC in its public consultation version was distributed in June 2008. Today the Climate Change office of the Sub-secretary of Environmental Planning and Policy of SEMARNAT is coordinating, with the support of the Office of the Presidency, the final review of the PECC for publication in 2009.

National Coordination

There are various areas in SEMARNAT in which the issue is addressed from different angles: The General Directorate for Climate Change Policies and of the Sub-secretary for Environmental Planning and Policy are responsible for the political handling of the issue and the promotion/review of projects for emissions reduction, amongst other matters. The Climate Change Directorate of the Attached General Directorate for International Cooperation of the International Affairs Coordination Unit is responsible for the international issues, including multi-lateral negotiations on the subject and regional and bilateral cooperation. There are very good communications with the Secretary of Foreign Relations who is responsible for coordinating the country's position towards the outside world.

Both the National Strategy for Climate Action and the Special Programme for Climate Change 2009 – 2012 were promoted and opened to Public Consultation, which in the case of the National Strategy received 47 comments and/or additional technical documents.

Studies and publications

There are numerous research centres, amongst them the Centre for Atmosphere Sciences of the National Autonomous University of Mexico and the Molina Centre; there is also coordination with government research institutes. Amongst the publications of INE for UNFCCC and the State are: Studies of the Economics of Climate Change in Mexico; Water and climate; Elements for adaptation to Climate Change; Towards a National Strategy on Climate Action; Formulation of Policy Outlines for Energy Efficiency in Key Sectors; National Project: Development of the Capacities for Stage II of the Adaptation to Climate Change in Central America, Mexico and Cuba; Regional Project: Development of the Capacities for Stage II of the Adaptation to Climate Change in Central America, Mexico and Cuba; Inventory of scientific and technological research in Climate Change in Mexico, 2005; Mexico and the Framework Convention (Country Study); 3 National Communications; GHG Emissions Inventories (every two years); etc.

International Coordination

The Mexican Government has opted to join international efforts by signing important agreements including the UN Millennium Goals. To date, Mexico has signed around 100 international agreements related to the environment and sustainable development. Mexico's participation in international activities: Instituto Interamericano de Investigación sobre el Cambio Global (Interamerican Institute for Research into Global Change) (IAI); Red Iberoamericana de Oficinas de Cambio Climático (Iberoamerican Network of Offices on Climate Change) (RIOCC); Dialogue on Climate Change, clean energy and sustainable development; Mexico - UK Collaboration to develop a State Plan for Climate Action in Veracruz; Bilateral cooperation in the Clean Development Mechanism of the Kyoto Protocol (Germany, Austria, Canada, Denmark, Spain, France, Japan, Italy, Netherlands and Portugal); Agreement establishing the Organización Latinoamericana de Energía (Latin American Energy Organisation) (OLADE); Agreement on the Interamerican Institute of Cooperation for Agriculture (1979); Agreement for the Creation of the Interamerican Institute for Research into Global Change (1992)

The Environmental Integrity Group (EIG) is a coalition which includes Korea, Mexico and Switzerland.

International Cooperation

Mexico has received institutional support and executed projects related to Climate Change jointly with the following internacional organisations: UNDP, GEF, North American Development Bank, IDB and JICA.

By the end of 1997, GEF had carried out projects in different sectors related with Climate Change worth a total of US$ 388.82 billion

Adaptation Mechanisms

Mexico has risk plans for the federal states; during the public consultation of the ENCC in 1997, the need arose to create the GT-ADAPT to place greater emphasis on actions for the prevention and mitigation of Climate Change.

Disaster prevention, Regulation of environmental impact and risks in the Federal District.

Land use planning and Environmental Impact Studies.

Mitigation Mechanisms

Atmosphere

Control of Atmospheric Contamination.

Transport

Regulation for the Prevention and Control of Contamination Generated by Automotive Vehicles Circulating in the Federal District and the Municipalities of the Conurbation; Declaration of Standards for Vehicle Emissions: New Fuels and Technology; Legal provisions granting tax and economic incentives to promote sustainable transport and the use of energy efficient private vehicles.

Energy

Recently the Congress of the Union approved the "energy reform" package, which includes amongst other things the Law for the Sustainable Use of Energy, the Law for the Use of Renewable Energy Sources, and Financing for Energy Transition. The Secretariat has a commission to coordinate actions and programmes to promote energy savings and renewable energy sources.

Waste

General Law for Waste Prevention and Integrated Waste Management.

Water

Law on National Water.

Forests

General Law for Sustainable Forest Development, 2003, Biodiversity and the coastal area, General Law on Wildlife, 2000.

General Law of Ecological Equilibrium for the Protection of the Environment; Environmental Law of the Federal District.

CDMs - Clean Development Mechanisms

Approved CDMs

Mexico has 114 projects approved. Seventy small projects, all with Switzerland, are for the rehabilitation of livestock farms and sanitary landfills. In the case of the big projects, the nation with the greatest number of projects is still Switzerland, with three projects from Spain, France and Japan in the wind-power energy sector. The CO_2 equivalent absorbed is calculated at more than 7.5 million tons CO_2/eq.

Nicaragua

International commitments

United Nations Framework Convention on Climate Change ratified in 1995.

Kyoto Protocol ratified in 1999.

Legal Structure

MARENA (Ministry of the Environment and Natural Resources) is the national authority responsible for Climate Change. The Climate Change Directorate is the body responsible for policies; Oficina Nacional de Desarrollo Limpio (National Office for Clean Development) (ONDL) is a non-concentrated administrative unit for Climate Change matters; it is dependent in the hierarchy on the Ministerio del Ambiente y los Recursos Naturales (Ministry of the Environment and Natural Resources) (MARENA), created by Executive Decree N. 21-2002. The ONDL is under the coordination of a mixed Directive Council which includes State and civil society institutions.

Mandate

Its functions are: (i) to contribute to the mitigation of Climate Change by promoting environmentally sustainable investment, through the implementation of CDM projects; (ii) to address issues of vulnerability and the process of adaptation to Climate Change; (iii) to prepare national GHG inventories and NC.

Human resources

4 staff.

National Strategy on Climate Change

Nicaragua´s first National Communication includes the Plan de Acción Nacional ante el Cambio Climático (National Action Plan for Climate Change) (PANCC) which was established in 2001. The PANCC was updated in 2004, however it has not yet been made official. Since 2005 the phase of preparing the second NC has begun.

Studies

Publications of the Office for Clean Development.

La Fe Wind power Project. PDD Project Document, Strategy for Adaptation to Climate Change of Water Resource and Agriculture Systems for River Basin N. 64, Nicaraguan Technical Report, Second National Inventory of Greenhouse Gases, Larreynaga Hydro-electricity Plant Project

The Instituto de Estudios Territoriales (Institute of Territorial Studies) (INETER) coordinates actions for the collection of meteorological information and broadcasts them in case of an alert.

National Coordination

There is little coordination: MARENA coordinates with the Sistema Nacional de Prevención, Mitigación y Atención de Desastres, (National System for the Prevention, Mitigation and Reaction to Disasters) SINAPRED, in the prevention and control of environmental disasters, emergencies and contingences. It works with the Sistema Nacional de Información Ambiental, (National System for Environmental Information) SINIA.

International Coordination

At the regional level, Nicaragua is a member of CCAD.

Adaptation Mechanisms

Risk plans.

CDMs - Clean Development Mechanisms

Approved CDMs

The ONDL is executing the project "Capacity Development for the Clean Development Mechanism – CD4CDM", financed by UNEP RISØ Training Centre on CDM. Three big CDM projects are being executed, one with wind power.

Panamá

International commitments

United Nations Framework Convention on Climate Change, signed in 1993 and ratified in 1995

Kyoto Protocol, signed in 1998 and ratified in 1999.

Legal Structure

CNCC - Comité Nacional de Cambio Climático (National Climate Change Committee) coordinates different ministries, including: Foreign Relations, Agriculture, Energy and Health.

ANAM - Is the recognised National Environment Authority (Autoridad Nacional del Ambiente).

UCCD - Unidad de Cambio Climático y Desertificación (Climate Change and Desertification Unit) is executing the National Climate Change Programme.

Mandate

The UCCD includes promotional and regulatory roles, and its capacity to influence national policies is unclear.

Human resources

6 staff.

National Strategy on Climate Change

In 2004 ANAM proposed a National Policy on Climate Change, consisting of seven environmental policies. At present, with the support of IDB, it is preparing the national strategy.

International Coordination

Panama has signed cooperation agreements with Canada, Spain, Holland and Italy. In relations with UNFCCC it is represented by the SG of CCAD of the SICA.

Adaptation Mechanisms

At the regional level, as an adaptation action, the UCCD carried out a vulnerability study of a river basin considered a prioritary, with the support of UNDP.

The reforestation of basins close to the area of enlargement of the Panama Canal, executed by the Panama Canal Authority as an adaptation measure, will allow the environmental impact of the project to be reduced and especially the costs of international insurance (actions in this respect were started in 1998). The Panama reforestation programme is considered a "case-study", since it has allowed insurance costs to be reduced.

Mitigation Mechanisms

Forests and water

Environmental services and restoration of river basins, Decree N. 209.

Reforestation programme of river basins close to the area of enlargement of the Panama Canal, executed by the Panama Canal Authority.

CDMs - Clean Development Mechanisms

Approved CDMs

The country has five small hydro-electricty projects approved. The portfolio of projects includes more projects for hydro-electricty, as well as wind power and one for reforestation. The projects are easily accessible and well documented.

REDD

Panama will have access to the Cooperative Fund for Forest Carbon.

Paraguay

International commitments

United Nations Framework Convention on Climate Change, signed in 1993 and ratified in 1995.

Kyoto Protocol, signed in 1998 and ratified in 1999.

Legal Structure

Secretaria del Ambiente (Environment Secretariat) (SEAM), created by Law N. 1561/00. The **National Climate Change Programme** is under the Directorate of Strategic Planning, Department of International and National Relations. The **Comisión Nacional de Cambio Climático** (National Climate Change Commission) (CNCC) is a collegiate body which forms part of the structure of the National Climate Change Programme; it consists of 17 institutions from the public and private sectors. The functions of this Commission are to define, supervise and evaluate national policy on Climate Change.

Human resources

9 staff, 5 of whom are external consultants.

The staff have received training from FMAM, GTZ and World Bank. Good relations with the private sector.

National Strategy on Climate Change

The National Strategy on Climate Change was prepared by the CNCC and approved by DS. N. 085-2003. Apart from identifying priority sectors, the ENCC defines 3 priority regions for vulnerability to Climate Change.

National Coordination

The SEAM cooperates and works with other institutions of central government in different ambits, e.g. with the Public Ministry, Environment Inspection for the inspection and protection of Natural Resources, with the Ministry of Agriculture and Livestock for specific policies and programmes, with the institutions for phyto-sanitary vigilance, with the Ministry of Public Health and Social Welfare, with the Secretariat for National Emergencies, with the National Tourism Secretariat, with the General Comptroller's Office of the Republic, with the Ministry of Foreign Relations, with the Secretariat for Social Action and with Sub-national Government organs such as provincial and municipal governments.

This coordination is effected through the Consejo Nacional del Ambiente – CONAM (National Council for the environment) which is an inter-institutional collegiate body for deliberation, consultation and definition of National policy on the environment, forming part of the National Environmental System.

International Coordination

Paraguay works with Work Group N. 6 of Mercosur.

CDMs - Clean Development Mechanisms

Approved CDMs

Currently Paraguay is not implementing any CDM projects. Some are awaiting approval in the biomass and hydro-electricity sectors.

Perú

International commitments

Peru ratified the **Kyoto Protocol** of the United Nations Framework Convention on Climate Change by Legislative Resolution N. 27824 of 20 September 2002.

Legal Structure

MINAM – The Ministry of the Environment, created by Legislative Decree 1013 (2008), has assumed authority over the issue of Climate Change from the National Environmental Council, the UNFCCC's former focal point and Designated National Authority (DNA).

FONAM – the National Environmental Fund is an institution of private law created by Law 26793 (1997), with the aim of promoting public and private investment in the development of plans, programmes, projects and activities oriented towards improving the environment, the sustainable use of natural resources, the strengthening of capacities for suitable environmental management. FONAM is recognized by the WB-CF (World Bank Carbon Fund) as the Focal Point of its activities in Peru in terms of the identification, classification and management of projects that can be presented to the Clean Development Mechanism to obtain Certificates of Reduced Emissions of greenhouse gases (GHG).

CNCC – Through Supreme Resolution 359-93-RE, the National Commission of Climate Change has been created and through Supreme 006-2009-MINAM, the National Commission's authority over the issue of Climate Change has been defined. Its operation has been adapted to the stipulations of DL 1013, Law Creating the Ministry of the Environment and the Organic Law of Executive Power.

The aim is to coordinate the various public and private sectors affected by the issue and involved in the implementation of the United Nations Framework Convention on Climate Change, as well as to design and promote the National Climate Change Strategy, the contents of which are to provide orientation for development strategies, plans and projects at the national, regional and sectoral level.

The CNCC is presided over by the MINAM and composed of representatives from the Ministries of Foreign Relations, of the Economy and Finances; of Production; of Agriculture; of Energy and Mines; of Transport and Communications; of External Commerce and Tourism; of Housing, Constructions and Sanitation; of Health and of Education as well as from the National Meteorological and Water Service; CONCYTEC; the Institute for Research of the Peruvian Amazon; the Geophysical Institute of Peru; the Institute for Peru's Sea and the National Environmental Fund. Representatives may also come from the National Assembly of Regional Governments; the National Council of Deans of Professional Colleges of Peru and the National Federation of Private Business Institutions (CONFIEP).

ENCC - The National Climate Change Strategy was created by the first CNCC and approved by Supreme Decree 086-2003 PCM. The aim of ENCC is to reduce the adverse effects of Climate Change through integrated studies of vulnerability and adaptation, which will identify vulnerable zones and/or sectors in the country where adaptation projects will be implemented. Controlling the emissions of local pollutants and greenhouse gases (GHG) through renewable energy and energy efficiency programmes in diverse production sectors. It has 11 strategic guidelines.

MINAM is currently creating 11 guidelines and identifying improvement proposals as part of its diagnosis process in updating the ENCC and in accordance with advances made in the field.

Mandate

MINAM is National Environmental Authority, the function of which is to design, establish, execute and oversee national and sectoral environmental policy, with authority over this policy. It is the focal point for UNFCCC and the Designated National Authority (DNA) for CDM. This organisation is responsible for the approval of CDM projects and has an ISO P-34 procedure for approving or rejecting them (maximum procedure time 45 days).

FONAM, as the national body to promote CDM projects, relates with the private and public sectors, gives advice in the development of projects and support in obtaining financing from national and international financial institutions, and promotes Peruvian projects internationally with potential purchasers and investors. The areas of intervention of the projects are CDM, Energy, Forests, Transport, Environmental Liabilities from Mining, Water and Waste.

Human resources

MINAM's General Directorate of Climate Change, Desertification and Water Resources currently has 17 staff members. These are working on the following issues: Vulnerability and Adaptation, Inventories and Mitigation, Media Relations and Training, REDD, Renewable Energy, CDM, among others.

National Strategy on Climate Change

The most important results have been the approval of the National Climate Change Strategy through Supreme Decree 083-2003-PCM and advancement of its implementation, which includes different adaptation initiatives.

Regional Climate Change Strategies

Two regions have developed regional Climate Change strategies:

Junín - This was the first region in the country to develop a Regional Strategy approved by Regional Decree 002-2007-GRJ/PR (December 2007). A Regional Climate Change Technical Group was created by Regional Executive Resolution 244-2005 GRJ/PR. At the same time it is a regional part of the PRAA Project, the Cuenca del Mantaro has been prioritized as a pilot basin for implementing adaptation measures, due to its vulnerability to the effects of glacier recession.

Amazon - The region approved a Regional Climate Change Strategy by Regional Ordinance 223, September 2008. The implementation of this falls under the responsibility of the Administration of Natural Resources and the Management of the Environment, in coordination with sectoral offices, OPDS, municipalities and other institutions. The region also has a Regional Climate Change Technical Group, created by the Regional Government of the Amazon by order of the Regional Environmental Commission (CAR) (Regional Ordinance 064-2004). The ERCC is now being published.

National Coordination

The environmental institution is being restructured and expanded with the creation of the Ministry of the Environment. The issue of the environment has been taken up by the government at the ministerial level, for which reason there are more trans-sectoral coordination resources and better coverage of the climate, geophysics, protected natural areas and the Amazon, as assigned to MINAM by the institutions responsible for these issues.

International Coordination

The Ministry of Foreign Affairs has conducted negotiations in the framework of the United Nations Framework Convention on Climate Change and Kyoto Protocol. In this context, Peru participates in the Intergovernmental Panel on Climate Change.

It has carried out, and continues to do so, various actions related to Climate Change in multiple regional forums, such as CAN, OTCA, CEPAL, etc.

It has created and negotiated content related to Climate Change for the Summit of Heads of State and Government from Latin America, the Caribbean and the European Union (EU-LAC), and is monitoring these agreements, in particular for the preparatory work for the Dialogue on Climate Change, which will be held in Peru.

In the framework of the Clean Development Mechanism, the Chancellery has carried out negotiations for the signing of Memoranda of Understanding (MoU) for CDMs with Canada, Austria, Japan and Spain. Additional MoU are being negotiated with Italy, Germany, France and the Netherlands.

Finally, it should be mentioned that Peru has applied to host the XVI Conference of the Parties of the UNFCCC.

Adaptation Mechanisms

In May 2001 Peru presented its first National Communication to the United Nations Convention on Climate Change. This contained information on the levels of GHG emissions and their principle sources (around 50% come from processes related to change of land use, such as deforestation), the vulnerability of our water resources and the El Niño Phenomenon (FEN) and its impacts.

From 2003 to 2005 the PROCLIM was implemented by CONAM, which strengthened the coordination and team work of 13 co-executing institutions and CONAM, financing planning and joint work concepts, optimizing the use of resources and testing an institutional environmental management model that features a public awareness component.

From January 2005 to October 2006, CONAM carried out the National Capacity Self Assessment in Peru for the following purposes: the diagnosis of the capacity, limits and requirements for achieving the goals of the three global environmental agreements, the identification of synergies between the 3 conventions to maximize the impact of actions and projects to contribute to successful sustainable development, and three Thematic Plans of Action as well as one Integrated National Plan of Action for Improving Capacity, which includes three Global Environmental Agreements and the identification of priority projects and actions, developed with the active participation of all relevant actors at a national, regional and local level.

To date Peru has carried out adaptation initiatives and has aided in the creation of 2 Regional Climate Change Strategies. At the same time, 3 regions have Regional Technical Groups and 4 are creating technical groups.

With the support of the Dutch Embassy, the "*Programme for the Strengthening of National Capacity to Manage the Impact of Climate Change and Air Pollution*" (PROCLIM) is being implemented and with the GTC the "*Adaptation Measures to Climate Change Project*" (PMACC).

The sectors involved in the 3 prioritized basins were: water resources, agriculture, marine fishing and socio-economics. The results were published. They are summarized as follows: Climate Change scenarios in Peru in 2050 for the Pure River Basin, Climatic Atlas of precipitation and air temperature in the Mantaro River Basin, Mantaro Basin Climate Change Diagnosis, Current and Future Climate Change Vulnerability and adaptation measures in the Mantaro River Basin, Integrated Local Evaluation and Climate Change Adaptation Strategy in the Piura River Basin and Future Climatic Scenarios and availability of water resources in the Santa River Basin. A bottom up methodology was used.

With international cooperation the following adaptation projects are being implemented:

- Second National Climate Change Communication (SCNCC; in conjunction with GEF)
- Adaptation to the impact of the accelerated recession of glaciers in the tropical Andes PRAA (World Bank)
- Climate Change Adaptation Programme (PACC; in conjunction with COSUDE)
- Integral and adaptive management of environmental resources to minimize climate change vulnerabilities in high Andean micro-basins (multiple agencies of the PNUD)
- Climate Change Adaptation Initiatives and Implementation of the National Climate Change Strategy, as promoted by the creation of three Regional Strategies (IBD)
- Study of the Economic Impact of Climate Change (IBD).

Mitigation Mechanisms

To date, in the framework of the Second National Climate Change Communication, the inventory of greenhouse gases up to 2000 has been created. It was identified that 47% of all emissions were generated by changes of land use, such as deforestation.

The Inventories and Mitigation Component of the Second National Communication includes two major results: a National Management System of Greenhouse Gas Inventories and the Strategy Proposal to mitigate these emissions, which is in its final stages.

Within the "Programme for the Strengthening of National Capacity to Manage the Impact of Climate Change and Air Pollution" (PROCLIM), a Map of Deforestation of the Peruvian Amazon up to 2000 was created. It was identified that San Martín is the most heavily deforested region, with 1,327,668.52 hectares of deforested land, which represents 18.51% of the country.

Energy

The Ministry of the Environment is running the Peru Eco-Efficient Programme, which is directed at public institutions, with the aim of promoting a new culture of efficient use of energy, paper, water and logistic resources, which would bring significant savings for the State. Workers, who are the principle consumers of these services, are being asked to act in an environmentally responsible manner.

The State is now seeking to promote the law on rural electricity from renewable energy sources (DL 1002) and a regulation that would ensure the quality of the systems and their installation. This would create a favourable field for the insertion of photovoltaic and wind energy into the rural electricity supply.

In the case of wind energy, 53 wind concessions are being studied, as the Ministry of Energy and Mines seeks to tender an additional 500MW for this type of electrical generation.

Peru promotes the use of biofuels, for which it has enacted Law 28054, Law on the Biofuel Market, Supreme Decree 013-2005-EM Regulation of the Law on the Biofuel Market and Supreme Decree 021-2007 Regulation of the Marketing of Biofuels. Currently, all diesel sold at a national level must contain 2% biodiesel. As of 1 January 2010, all gasoline will have to contain 7% ethanol nationally.

Promotion of renewable energy and energy efficiency with support of the IBD.

Waste

As part of the Peru Eco-efficient Programme, "Eco-efficient Municipalities" are being developed, which strive to use efficient resources and maximize potential with a focus on three working issues: sewage treatment, solid waste regulation and land management for sustainable development.

CDMs - Clean Development Mechanisms

Approved CDMs

Peru is considered the fourth most competitive country when it comes to CDMs.

The Ministry of the Environment is the agency that establishes environmental policies, the focal point for the UNFCCC and the Designated National Authority (DNA) for CDMs. MINAM has developed and implemented procedure ISO P-34 for the rapid evaluation of CDM projects. Participants in the project are able to obtain approval or rejection for the CDM project activity in less than 45 days. This approval refers exclusively to the contribution of the project to the country's sustainable development.

Potential sectors within the country:

- Energy and industry
- Transport
- Waste
- Forests

The profile includes over 126 CDM projects, 24 of which come from the energy sector and 29 from the forestry industry. This represents an investment of over US$ 6.271 billion, which has the potential to reduce GHGs by 15,955,122 TCO_2e / year.

Of the 25 CDM projects approved by MINAM, 14 are recognized by the UNFCCC. Another 12 are being validated, and one project has been approved as a methodology project. It should be mentioned that 5 projects are already receiving investment through the sale of CERs.

In the latest rankings by the journal Point Carbon, Peru is number 6 in the world when it comes to CDMs, having risen two spots from the previous ranking.

The DNA approved the first forestry project at the national level in June 2008. This was called "Reforestation, sustainable production and the reduction of carbon in the rural community José Ignacio Távara - Piura".

REDD/FCCB

Peru is one of the countries that benefit from the World Bank's Cooperative Carbon Fund, having received approval from RPIN.

Among its national initiatives is the Peruvian Society for Environmental Justice (SPDA), which has begun difficult work under the auspices of the Forestry Project, by which the institutional and normative framework is being evaluated so that a proposal can be put together for the regulation of payment schemes for environmental services related to carbon. In addition, through a WWF Peru initiative, a project has been created for the development of the Base Line for the Potential of REDD in Natural Protected Areas, Indigenous Lands and Forest Concessions in the Peruvian Amazon, which is also the project's title. The projected is to last 18 months and will make use of a total of US$ 500,000.

The REDD National Panel also assists various institutions involved with REDD and which have an interest in developing the initiative as well as development projects geared towards organising and coordinating activities to be realized for the purposes of defining the strategy for the next few years.

Uruguay

International Commitments

United Nations Framework Convention on Climate Change, signed and ratified by Uruguay in 1994, Law N. 16.517.

Kyoto Protocol, signed by Uruguay in 2000 and ratified in 2001, Law N. 17.279.

Legal Structure

MVOTMA (Ministry of Housing, Land Planning and the Environment), created by Law 16.112, 1990, established the UCC (Climate Change Unit) in 1994 as part of the DINAMA (National Environement Directorate) and by Ministerial Resolution 505/94, with the aim of facilitating the application of the UNFCCC, the achievement of the objectives derived from the latter and the development of the execution of its expertise in the field of Climate Change. From a legal point of view the competence of MVOTMA and thus of UCC, have been reinforced by the approval of laws that are important for Climate Change and the environment. Following the ratification of the KP in 2001, the authority of the UCC was expanded by Ministerial Resolution 341/2001, granting it executive functions as the DNA for the application of the CDM. In addition, Law 17.283, 2000 regarding general environmental protection, designated MVOTMA as the competent national authority in Climate Change, in establishing mitigation and adaptation measures and in a special form for the regulation of greenhouse gas emissions.

COTAMA - The Environment Protection Technical Advisory Commission is an area that coordinates and provides advice on environmental matters. It is part of MVOTMA's sphere of activities and is made up of the following institutions: The Ministries of Foreign Relations, Economy and Finance, Transport and Public Works, Industry, Energy and Mining, Farming, Agriculture and Fishing, the University of the Republic, the National Congress of Municipal leaders, the Uruguay Chamber of Industries, the National Uruguayan Chamber Of Commerce and Services, the Uruguayan Rural Association, the Uruguayan Network of Environmental NGOs, the National Association of NGOs for Development and the National Institute of Farming Research. A specific work group operates as part of this collective for the assessment of CDM projects.

CNDS – The National Sustainable Development committee, which coordinates the monitoring of the implementation of Agenda 21.

SNRCC – The National Climate Change Response System was created by Decree 238/009 of 20 May 2009, for the purposes of coordinating and planning the necessary public and private activities to address Climate Change. The organization is operated by MVOTMA and is organized through a Coordination Group and an Advisory Commission. The Coordination Group is made up of high ranking political representatives from the Ministers of the Environment; Foreign Relations; Defence; Industry and Energy; Health and Agriculture and Tourism and from the Office of Planning and Budget; the National Emergency System and the National Congress of Governors. The Advisory Commission is organized in the same manner as the System's technical body, including experts from a number of institutions – public and private – that focus on the issue, such as the University of the Republic, ANEP, professional environmental NGOs, etc.

Functions

MVOTMA formulation, execution, supervision and evaluation of national environment plans and the instrumentation of national policy on environmental matters; coordination with other national and departmental public bodies; relationships with international bodies in this field; control of compliance with environmental protection norms for public and private activities.

MVOTMA, in its capacity as an environmental authority, must establish Climate Change mitigation and adaptation measures, regulate GHG emissions and coordinate the actions and functions of other public and private bodies that are in some way related to the aforementioned matters.

DINAMA, planning, programming, supervision and instrumentation of environmental policy; coordination with other (national and departmental) public and private bodies regarding the implementation of their actions and the establishment of norms and controls for environmental quality.

UCC acts as the body that operates and implements activities to comply with national commitments that result from me UNFCCC. Its main functions are: (i) the organisation, management and implementation of activities that result from the application of the UNFCCC; (ii) developing international relationships with UNFCCC bodies, institutions and agencies, or those linked to the UNFCCC; (iii) drawing up GHG inventories and keeping them up to date; (iv) identifying, drawing up and evaluating Climate Change response policies and measures; (v) technology transfer, practices and processes for the reduction and prevention of GHG emissions; (vi) the promotion and development of training activities, providing information and raising public awareness about Climate Change.

The **UCC** is the KP Designated National Authority for (i) preparing methodologies for identifying and evaluating CDMs; (ii) identifying the priority sectors for mitigation (iii) promoting the CDMs (iv) approving CDM projects in conjunction with a specific COTAMA mixed Working Group.

COTAMA - The Commission's functions are: (i) to work with the executive authority to define the national environment policy; (ii) to cooperate with the formulation, implementation and evaluation of national environment plans; (iii) act as a body for inter-institutional coordination on the subject of environmental protection.

Human resources

4 staff.

The staff has received technical support, training and economic resources from FMAM, the UNDP, the Canadian Government and the World Bank.

National Climate Change Strategy

1) Programme of General Measures for Climate Change Mitigation and Adaptation in Uruguay (PMEGEMA), 2004. The document presents a series of Climate Change mitigation and adaptation measures in the most important sectors of the national economy and in a form consistent with the country's development plans. It also estimates the necessary investment costs in these sectors. The PMEGEMA has been declared an item of ministerial interest.
2) National action plan 2010 – 2015 in the framework of the SNRCC. In 2009 a plan of action was created at the national level which addresses three work areas: (a) Creation of the Map of Vulnerability of Uruguay by district, town and typology (based on the identified problems); (b) Identification of existing Capacities (human, economic and institutional resources); (c) Updating the PMEGEMA. In this Plan the following specific aspects are included: (a) Creation of scenarios; (b) Determination of impacts in each sector; (c) Vulnerability of the sectors to the impacts identified; (d) Opportunities – adaptation measures; (e) Strengthening of inter-institutional links; (f) Public awareness.

National Coordination

The UCC coordinates directs actions with the Ministries for the Economy, Foreign Relations, Industry and Energy and Agriculture as well as other governmental institutions. The UCC has held several CDM promotion events, with links for key industrial sectors. The UCC also coordinates its activities with the private production sector, the academic world and civil society. In this sense, it runs awareness campaigns for civil society, with an emphasis on environmental education in schools.

Studies and publications

Programme of General Measures for Climate Change Mitigation and Adaptation in Uruguay (PMEGEMA), 2004; Second National Communication, 2004; Proposal for the Study of Mitigation Measures, GHG Inventories (1994, 1998, 2000, 2002); GEO-Uruguay, Energy Sector Mitigation Study (1999).

International Coordination

Uruguay is a member of the MERCOSUR and coordinates regional programmes through SGT N. 6. Bilateral agreements have been established for cooperation in the framework of CDM with Annex I countries, including Canada, France, Spain, Italy and the Netherlands.

Adaptation Mechanisms

1) "Prevention and Mitigation of Environmental Emergencies Caused by the Climate" is a document that presents a diagnosis of the national situation as regards this issue and includes lines of action for a prevention strategy for environmental emergencies, especially droughts and floods.
2) The objective of the "Adapation Project in the Coastal Zone" is to establish adaptation politicies and practices in territorial management and coastal administration, which should serve to increase the resiliency of coastal ecosystems to Climate Change.

Mitigation Mechanisms

Transportation

A bill concerning the regulation of production, commercialisation and use of agrofuels. This law will give a boost to the national market for these fuels, diversification of the energy matrix and access to the international carbon market.

Energy

Agrofuels Law (Law N. 18.195/2007).

Decree to contract electrical energy for the national grid, which is generated by renewable and autochthonous sources: wind energy, biomass and small hydroelectric plants (Decree 77/2006).

The establishment of a Solar Promotion Group (Mesa Solar) and a bill to promote solar energy.

Waste

Implementation of the first investment project for the mitigation of methane emissions: "Demonstration project for recuperating methane from the Las Rosas landfill site (Department of Maldonado) and using it for energy".

Water

Law 17.902 (2005) about the decentralisation of water management functions (does not include the management of risks of climate impacts and other aspects that are important for the integral management of water resources).

Forests

The Forestry Law (N. 15.939, 1987), declares the defence, improvement, expansion and creation of forest resources as a matter of national interest, along with the development of forestry industries and, in general, the Forest economy.

Biodiversity and the coastal area

Proposal for a National Strategy for the Conservation and Sustainable Use of Biological Diversity in Uruguay, Biodiversity and Protected Areas Division, MVOTMA, 1999 and 2006.

Programme for the Conservation of Biodiversity in Sustainable Development in the Eastern Wetlands (UNESCO, 1976). Ecopla provides a long-term initiative aimed at strengthening institutions, the scientific community, managers and the public in general, regarding aspects related to the Integral Management of the Coastal Zone (GIZC)

SNAP - Strengthening of the Implementation Process of the Uruguayan National Protected Areas System.

FONAMA - National Environment Fund (Added to article 454 of Law N. 16.170, from the 28th of December 1990).

Disaster prevention

National Emergency System (with inter-institutional integration and multidisciplinary in nature) manages the following programmes: (i) Framework Programme for the Sustainable Management of Water Resources in the Basin of the River Plate, related to variability and climate change (from 2002); (ii) drought, Operational Working Group, aimed at coordinating, planning and implementing works to ensure a supply of water for production and animal consumption (from 2000). (iii) floods, resettling families and risk prevention and evacuation plans in sensitive areas; general action plan for forest fire prevention, alarm and response; (iv) general action plan for the control of the Aedes aegypti mosquito; (v) response to emergencies with Dangerous Goods on national routes and highways; (vi) National Emergency Response Plan for Radiological Accidents.

Participation

DINAMA - Creation of the Department for Media Relations (2007), aimed at encouraging Citizen Participation and Environmental Education.

Venezuela

Land use planning and Environmental Impact Studies

Land Use Planning and Sustainable Development on a National and Regional Scale, Law N. 27.515 (2008). The law does not include the subject of Climate Change, but it requires its activities to have Prior Environmental Authorisation, it defines uses and limitations for rural and forest areas and special protection measures for coastal areas and other areas subject to natural risks.

Guidelines are being drawn up for considering climate change in Environmental Impact Studies.

CDMs - Clean Development Mechanisms

Approved CDMs

The sectors that have been identified as a priority for mitigation are (i) renewable energy sources for electricity production; (ii) the transport sector, as it is the main contributor to GHG emissions; and (iii) waste.

The UCC has opted to implement the MATA-CDM instrument (Multi-Attributive Assessment of CDM Projects), developed by the Zurich Institute of Technology in Switzerland (ETHZ) to evaluate CDM projects. This formula lays out four approval criteria: environmental, economic, social and political (participation by citizens and local governments). The prerequisites for obtaining MVOTMA's national approval in its capacity as DNA: i) approval request letter containing information about the administrative nature of the project's developer; ii) the Project Design Document (PDD) in accordance with the approved international format; iii) a written declaration from the project's proposer about its contribution to the country's sustainable development, considering the sustainable development criteria and indicators for the national assessment of CDM projects in Uruguay; iv) details of the information provided in section G (Observations by interested parties) of the Project Design Document, including a magnetic or digital recording of the public meeting or consultation carried out by the project's developer for the presentation of the CDM project; and v) Prior Environmental Authorisation, if necessary, granted by MVOTMA, as per Decree N. 349/005, or, if this is not necessary, the Environmental Impact Study.

CDM World Bank Carbon Funds are being considered.

Currently there are seven projects with national approval, three of which have already been recognized by the UNFCCC. Two projects are in the process of being validated and CERs have been issued at a national level.

International Commitments

United Nations Framework Convention on Climate, signed by Venezuela in 1992 and ratified in 1994, Law N. 4825 Ext.

Kyoto Protocol, signed by Venezuelan in 2004, N. 38.081.

Legal Structure

The Ministry of Popular Authority for Foreign Relations – Coordinator of Integral Cooperation, Economy and International Commerce.

After signing the Convention, the plan to create a Climate Change unit never became reality. The issue has become an incidental function of the Ministry for the environment.

The mitigation actions cited are:

Tree Project: Massive reforestation; Waste: improvements in waste management; Vehicle pool: the elimination of lead from petrol beginning in 2005 and the purchase of 30 thousand barrels of ethanol per day from Brazil to be used as a vehicle fuel. Mass transport: expansion of the Metro lines in Caracas, the construction of the Valencia and Maracaibo Metro, the railway to the Tuy Valleys and the Mérida trolley bus, Light bulb Project: implemented by the Ministry of Energy and Oil, consists of replacing 70 million fluorescent light bulbs.

International Coordination

Amazon Cooperation Treaty.

Forests

Forest Law, Decree N. 6070 14 from 2008, Biodiversity and coastal area.

Organic Environment Law, 2007 (arts. 60 and 80, with reference to air quality and climate change).

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Belgium

Actions financed by Belgium (Information dated October 2008)

MS EXPENDITURE ON CLIMATE CHANGE ACTIVITIES					
ODA, Climate related	**2001 (total)**	**2005 (total)**	**2006 (total)**	**2007 (total)**	**2001 -%W**
Bilateral ODA Mitigation					
Agriculture	2,000,639 €	3,491,765 €	4,041,021 €	3,065,376 €	4%
Water	758,254 €	2,106,201 €	1,808,382 €	1,332,877 €	40%
Forest	99,515 €	53,137 €	83,310 €	37,249 €	100%
Energy	0 €	0 €	0 €	0 €	
Environment	173,525 €	0 €	0 €	0 €	40%
Multisectoral	0 €	0 €	0 €	0 €	
	3,031,933 €	5,651,103 €	5,932,713 €	4,435,501 €	18%
Bilateral ODA Adaptation					
Agriculture	4,468,333 €	4,469,359 €	4,041,021 €	3,986,687 €	5%
Water	2,302,836 €	1,388,688 €	1,521,312 €	1,748,943 €	78%
Forest	20,264 €	131,375 €	782,096 €	1,915,676 €	100%
Energy	0 €	0 €	0 €	0 €	
Environment	289,475 €	0 €	0 €	0 €	24%
Multisectoral	1,827,313 €	6,983,371 €	6,654,392 €	9,001,141 €	12%
	8,908,220 €	12,972,793 €	12,998,821 €	16,652,447 €	26%
Contribution through EC					
Multilateral contributions					
Agriculture	448,410 €	277,702 €	223,504 €	337,962 €	15%
Water	0 €	0 €	0 €	0 €	
Forest	0 €	0 €	0 €	0 €	
Energy	0 €	0 €	0 €	0 €	
Environment	359,446 €	0 €	0 €	0 €	23%
Multisectoral	65,453 €	15,010,000 €	13,910,000 €	13,560,000 €	5%
	873,309 €	15,287,702 €	14,133,504 €	13,897,962 €	18%
TOTAL	**12,813,462 €**	**33,911,598 €**	**33,065,038 €**	**34,985,911 €**	**24%**

2005 -%W	2006 -%W	2007 -%W	2001 CC	2005 CC	2006 CC	2007 CC
4%	4%	4%	72,103 €	124,007 €	159,218 €	110,180 €
40%	40%	40%	303,302 €	842,481 €	723,353 €	533,151 €
100%	100%	100%	99,515 €	53,137 €	83,310 €	37,249 €
			0 €	0 €	0 €	0 €
			69,410 €	0 €	0 €	0 €
			0 €	0 €	0 €	0 €
18%	16%	15%	544,330 €	1,019,624 €	965,881 €	680,580 €
8%	10%	10%	230,014 €	360,949 €	395,357 €	410,498 €
71%	73%	72%	1,787,935 €	991,853 €	1,109,886 €	1,265,210 €
100%	100%	100%	20,264 €	131,375 €	782,096 €	1,915,676 €
			0 €	0 €	0 €	0 €
			68,204 €	0 €	0 €	0 €
13%	13%	14%	215,370 €	887,917 €	835,714 €	1,224,924 €
18%	24%	29%	2,321,787 €	2,372,094 €	3,123,052 €	4,816,308 €
12%	14%	14%	68,928 €	32,906 €	30,576 €	47,685 €
			0 €	0 €	0 €	0 €
			0 €	0 €	0 €	0 €
			0 €	0 €	0 €	0 €
			82,425 €	0 €	0 €	0 €
5%	5%	5%	3,273 €	750,500 €	695,500 €	678,000 €
5%	5%	5%	154,625 €	783,406 €	726,076 €	725,685 €
12%	**15%**	**18%**	**3,020,742 €**	**4,175,124 €**	**4,815,009 €**	**6,222,573 €**

Czech Republic

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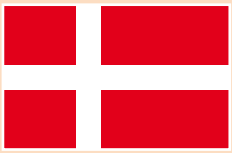
Actions financed by Czech Republic (Information dated November 2008)

Title	Beneficiary	Objective	Sector	Budget (€)	Date beginning / end
Actions since 2002					
Geological survey of natural hazards in the central part of Nicaragua	**Nicaragua**	Prediction of natural hazards	Environmental protection	582,200	2002 - 2006
Assessment of the natural hazards in the catchments of the Rivers Chira and Piura in the north-western part of Peru	**Peru**	Prediction of natural hazards	Environmental protection	320,000	2003 - 2006
Geological survey of natural hazards in the south-eastern Salvador in the Central America	**Salvador**	Prediction of natural hazards	Environmental protection	360,000	2003 - 2005
Reduction of vulnerability / increase of sustainability of the Loja city infrastructure in unfavourable geological conditions	**Ecuador**	Prediction of natural hazards	Environmental protection	157,926	2007 - 2009
Regional geological studies to define and predict the natural hazards in main regions of the Central America	**Nicaragua, Costa Rica, Salvador**	Prediction of natural hazards	Environmental protection	688,400	2007 - 2009
Research and evaluation of geomorphological and hydrogeological conditions of the Piura river basin to mitigate environmental factors restricting the social and economic progress of the region	**Peru**	Prediction of natural hazards	Environmental protection	443,912	2007 - 2010

Denmark



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Actions financed by Denmark (Information dated November 2008)

EU Country	Title	Beneficiary
Actions since 2002		
Denmark in cooperation with other donors and IUCN	Formulation of Regional Strategy for Climate Change	**Central America - NGOs, Civil Society, Research institutions.**
Denmark in partnership with the National Climate Change Programme	Support to the implementation of the national mechanism for climate change in Bolivia	**Bolivia: Various ministries**
Denmark in partnership with UNDP	Strengthening of national capacities for information sharing on climate change	**Bolivia: Various actors**
Denmark in partnership with local NGO's Agua Sustentable & Ayni Tambo	Adaptation to climate change in areas affected by glacier melting in Bolivia	**Bolivia: Communities near Illimani mountain, Palca**
Denmark	Annual Report on Environment in Nicaragua	**Nicaraguan Ministry of Environment and Natural Resources, NGOs, regional administration units and universities**
Denmark in cooperation with FAO	Fire belt development in forests affected by Hurricane Felix in the North Atlantic Autonomous Region, RAAN	**Nicaragua - North Atlantic Autonomous Region (RAAN), Regional administration and local communities**
Denmark in cooperation with UNDP	Formulation of National Climate Change Strategy	**Nicaraguan Ministry of Environment, other national institutions, research institutions, NGOs, local communities**
Future Actions		
Denmark in cooperation with the UK	South America Regional Economics of Climate Change Study	**A number of countries across the region could be covered by this study**
Denmark in cooperation with IUCN	Building capacity of Central American society to deal with climate change	**Central American civil society Regional official institutions NGOs**
Denmark in cooperation with UNDP	Support for early action in regard to the national strategy for climate change	**Nicaragua – relevant ministries, NGOs, Civil Society**
Denmark as part of basket fund arrangement to be designed in 2009	Support to National Mechanism for adaptation to climate change	**Bolivian Government**

Specific objective	Sector	Budget (€)	Date beginning / end
Supporting the Mesoamerican Region in the formulation of the Regional Strategy on Climate Change.	Cross-cutting	50,000	2008
Mainstreaming of climate change in key ministries	Multi-sectorial, public administration	225,000	January 2008 - June 2009
Information sharing	Multi-sectorial, Universities, climate related authorities, NGO's	260,000	January 2008 - June 2009
Pilot project on water resource management near melting glaciers	Water	184,000	January 2008 - June 2009
Provide information for national planning process	Environment	2002 / 20,000 2005 / 20,000 2007 / 20,000	Annually
Rebuild natural barriers to prevent spreading of forest fires in the North Atlantic Autonomous Region.	Environment and Transport	DK 537,000	November 2008 - July 2009
Provide support for preparation of an overall framework to tackle climate change concerns, and to start a process for a gradual inclusion of these issues into the national development agenda.	Environment	DK 15,000 UNDP 28,000	January - October 2008
Regional Economics of Climate Change Studies (RECCS) identify the implications of action on climate change for the economies of countries and regions and for specific socio-economic groups The RECCS cover the likely impacts and potential adaptation and mitigation response.		UK: 950,000 DK: 235,000	Expected to be completed by July 2009
Capacity Strengthening of the social and productive sectors of the Central American countries. To promote responsible and active participation in the design and implementation of policies and strategies for climate change in the region and at international level.	Cross-cutting	844,039	November 2008 - July 2010
- Support the design and negotiation of a national policy re climate change - Provide support for the general Directorate of Climate Change in the Ministry of Environment and Natural Resources. - Provide support for capacity building at different level of administration &civil society regarding effects& risk associated to the climate change	Cross cutting	DK 160,000 UNDP 50,000	2009 - 2010
To create common funding mechanism for adaptation to climate change	Multi-sectorial	1,342,000	2009 - 2011

Finland

EuropeAid

Finnish development cooperation in environment, climate change and energy
(Information updated on October 2009)

Title	Beneficiary	Specific objective	Sector	Budget (€)	Date
Actions since 2002					
Programme for Biological Diversity of the Peruvian Amazonia - BIODAMAZ	**Peru/ Amazonian region**	Conservation and sustainable use of the Peruvian Amazonia	Environment and Development	5.2 M	1999 - 2007
Regional Biodiversity Programme for Andean Amazonia - BIOCAN	**Member states of the Andean Community (CAN)**	Conservation and sustainable use of the Andean Amazonia	Environment and Development	1.8 M (I-phase) 6.27 M (II-phase tentatively)	I-phase 12/2007 - 5/2009; II-phase 2009 - 2011
Technical Assistance to DEVIDA (National Commission for Drug Control)	**Peru/DEVIDA**	Capacity building in conservation and sustainable use of forests.	Alternative Development	940,000	1999 - 2008
Integral management of forests in Pichis Valley	**Peru/DEVIDA**	Development of alternative sources of livelihood for local population.	Alternative Development	750,000	2007 - 2010
Debt Exchange Fund/ Gran Ruta Inca	**Peru**	Conservation and sustainable use of biodiversity	Environment	*Debt exchange fund as a whole approx. 3.25 M	2008 -
Debt Exchange Fund/ Ecological Corridor Nanay-Pucacuro	**Peru**	Conservation and sustainable use of biodiversity	Environment		2008 -
Debt Exchange Fund/ Project for North-Western Biosphere	**Peru**	Conservation and sustainable use of biodiversity	Environment		2008 -
Institutional Cooperation on Meteorology and Climatology	**Peru**	Improve the capacity of providing meteorological and climatological services	Meteorology, Climatology	500,000	2009 - 2013
The Energy and Environment Partnership with Central America	**Central America (Gua., Bel., Hon., Sal., Nic., Costa-R., Pan., Rep. Dom.)**	Promote the renewable energies in the region, contributing to sustainable dev. and the mitigation of the global Climate Change.	Climate Change, Environment	10.4 M (Tentatively planned 6.5 M	2003 - 2009 2010 - 2012)
Future Actions					
Renewable Energies programme in the Andean region	**Peru, Bolivia, Ecuador, Colombia**	Co-financing of relevant, innovative and replicable initiatives contributing to sustainable development	Renewable energy, Environment, Climate change	6.0 M tentatively	2010 - 2012
Forest Development Programme on the Andean region	**Peru, Bolivia, Ecuador, Colombia**	Sustainable forest management including REDD, PES and CDM actions	Environment, Forestry, Natural resources	6.5 M tentatively	2010 - 2012
Regional Early Warning Systems	**Andean Community**	In preparation phase	Climate Change	To be confirmed	2010 -

* Debt Exchange Fund: The funds (3,25 MEUR) have been transferred to Peru for the implementation of three environmental projects and for supporting the sustainable use of natural resources.

Germany

Actions financed by Germany (Information dated November 2008)

EuropeAid

A. Federal Ministry for Economic Cooperation and Development (BMZ)

Title	Beneficiary	Specific objective	Sector	Date beginning / end
Actions since 2002				
		Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)		
PROAGRO Sector program - Sustainable agricultural development	**Bolivia**	- agriculture and irrigation - management of water resources and watershed management - adaptation to climate change - combat desertification	Agriculture	2005 - 2017
Management of Nature Conservation Areas and their Buffer Zones / Biodiversity and Protected Areas -	**Bolivia**		Biodiversity	1999 - 2010
Energy and urban- industrial environmental protection	**Brazil**	- mitigation of climate change - energy efficiency - environmental protection - environmental policy & governance of natural resources - poverty reduction	Energy	2004 - 2008
Project for renewable energies (RE) 1	**Brazil**	- renewable energies - environmental policy and governance of natural resources	Energy	2004 - 2011
Project establishment of biological reserves and sustainable management of natural forests in Amazonian	**Brazil**	- protection of tropical forest & biodiversity - land use planning - agriculture & silviculture - environmental protection - ecological finance (carbon sequestration)	Nature Conservation	2007 - 2009
Project for demarcation and protection of indigenous areas - Indianergebiete	**Brazil**	- environmental policy & governance of natural resources - protection of tropical forest & biodiversity	Nature Conservation	2007 - 2009
Project land use planning and land use development in Amazonian - Raumordnung	**Brazil**	- land use planning - protection of tropical forest and biodiversity - environmental policy and governance of natural resources	Nature Conservation, rural development	2008 - 2010
Program of integrated regional development Nordostprogramm	**Brazil**	- trade of agricultural products - combat of desertification - protection of tropical forest and biodiversity - environmental protection	Sustainable economic development	2005 - 2010
Project to promote energy efficiency (EE) 1	**Chile**	- energy efficiency - transport - management of infrastructure	Energy	2006 - 2010
Renewable energies II	**Chile**	- energy efficiency - renewable energies - transport	Energy	2004 - 2010
CREDP Promotion of renewable energies in CARICOM	**Caribbean**	- mitigation of climate change - land use planning - watershed management - energy efficiency - drinking water supply - catastrophe precaution - renewable energies - environmental policy & governance of natural resources.	Energy	03/2003 - 03/2012
ARTIBONITO Regional project for sustainable use of natural resources in the riverbassin Artibonito	**Haiti / Dominican Republic**	- adaptation to the climate change - management of watersheds - environmental protection - agriculture and siviculture - combat desertification - environmental policy & governance of natural resources - protection of tropical forest and biodiversity - land use planning - environmental financing - catastrophe precaution	Nature Resource Management	08/2004 - 07/2013
UNCCD LAK Regional project for combat desertification in the Caribbean and Central America	**Caribbean**	- adaptation to climate change - protection of tropical forest & biodiversity - environmental protection - agriculture & silviculture - watershed management- combat desertification - drinking water supply - catastrophe precaution - cross-border environmental protection & development	Natural Resource Management	01/2003 - 06/2009

RE /EE IDB Program for renewable energies and energy efficiency	**Caribbean**	- mitigation of climate change - environmental protection - management of watersheds - wastewater management - catastrophe precaution - environmental policy and governance of natural resources	Energy	01/2005 - 12/2009
TRIFINIO Regional project for sustainable development in the river bassin Rio Lampa in the region of Trifinio	**Central America**	- adaptation to climate change - protection of tropical forest & biodiversity - land use planning - watershed management - environmental protection- combat desertification - agriculture & silviculture - catastrophe precaution- environmental finance - environmental policy & governance of natural resources - cross- border environmental protection & rural development		01/2009 - 12/2014
CERCAPAZ Project for peace development through promotion of cooperation between state and civil society	**Colombia**	- environmental policy and governance of natural resources - agriculture and silviculture - management of watersheds - land use planning	Natural Resource Management	01/2007 - 12/2011
CYMA Programme for competitiveness and environment	**Costa Rica**	-environmental policy and governance of natural resources - finance of environment - wastewater management - waste management - renewable energies - energy efficiency	Environmental Management	2006 - 2009
Programme Conservation and Management of Natural Resources	**Dominican Republic**		Protection and Natural Resource Management	2001 - 2009
Programme for management and protection of natural resources in watersheds	**Dominican Republic**	- watershed management - decentralisation and local development planning - payments for environmental services - drinking water supply - protection of tropical forest & biodiversity - combat of desertification- environmental policy & governance of natural resources	Protection and Natural Resource Management	2003 - 2011
Tropical Forest Protection Gran Sumaco	**Ecuador**		Biodiversity	1995 - 2003
Programme "Sustainable Natural Resources Management (GESOREN)	**Ecuador**	- including "tropical forest protection gran sumaco"	Biodiversity	2003 - 2010
NAMARES Programme for sustainable management of natural resources	**Ecuador**	- protection of tropical forest and biodiversity - environmental protection - agriculture and siviculture - management of watersheds - environmental policy and governance of natural resources	Protection and Natural Resource Management	2004 - 2013
RYGRAC - Regional project for reconstruction & catastrophe precaution in Central America after the Hurricane Stan	**Guatemala / El Salvador**	-adaptation to climate change - protection of tropical forest and biodiversity - environmental protection - agriculture and siviculture - management of watersheds	Catastrophe precaution	10/2006 - 09/2009
PRORENA Programme for promotion of sustainable use of resources and local economic development	**Honduras**	- protection of tropical forest and biodiversity - agriculture & siviculture - environmental protection - management of watersheds - combat desertification - energy efficiency - environmental policy & governance of natural resources	Environmental Protection Natural Resource Management	2003 - 2008
PROSURESTE - Natural Resource Management and Regional Development in South-eastern Mexico	**Mexico**		Biodiversity	2004 - 2008
Umweltmanagement Program for environmental management and sustainable use of resources	**Mexico**	- mitigation of climate change - mitigation of air pollution - ecological efficiency - waste management -renewable energies - energy efficiency - environmental info. system	Energy	04/2005 - 03/2010
San Juan Project sustainable land- and forest use river San Juan	**Nicaragua**	- protection of tropical forest and biodiversity - agriculture & siviculture - environmental protection - management of watersheds - environmental policy and governance of natural resources	Natural Resource Management	1997 - 2009

Programme "Sustainable Management of Natural Resources and Strengthening of Entrepreneurial Capacities"	**Nicaragua**		Biodiversity	2004 - 2008
Sustainable Management of Natural Resources	**Paraguay**		Biodiversity	2004 - 2010
PDRS Program for sustainable rural development	**Peru**	- adaptation to climate change - agriculture & siviculture - protection of tropical forest and biodiversity - management of watersheds & payments for environmental services- environmental policy & governance of natural resources - disaster risk management - integration of climate ch. into the environ. education agenda - combat of desertification	Rural Development and Natural Resource Management	2007 - 2010
PROAGUA Program for drinking water and sanitary	**Peru**	- adaptation to climate change- wastewater management - mitigation of climate change - watershed management - drinking water supply- catastrophe precaution - environmental policy & governance of natural resources	Water management	01/2004 - 09/2008
OTCA Maintenance of the tropical forest Amazonian	**9 Amazonian countries**	- environmental policy and governance of natural resources, including aspects of adaptation to and mitigation of climate change - protection of tropical forest & biodiversity - agriculture & siviculture- land use planning - watershed management- environmental financing - cross-border environmental protection & rural development	Nature Conservation	2003 - 2012
Sustainable Management of Natural Resources in the Gran Chaco Sudamericano	**Regional: Argentina, Bolivia, Paraguay**		Biodiversity	2002 - 2008
Strategic Partnership with IDB 1	**Regional**	- renewable energy - energy efficiency - biofuels	Energy	2007 - 2010
Strategic Partnership with CEPAL 2	**Regional**	- reduced emissions from deforestation	Protection of tropical forest	2007
Future actions				
4E- Programm: RE/EE in Brazil	**Brazil**	- mitigation of climate change - renewable energies - energy efficiency - rural electrification - environmental policy and governance of natural resources	Energy	2009 -
Programm Nachhaltige Energie / Program Sustainable Energy	**Mexico**	- energy efficiency - renewable energies - reduction of greenhouse gas emissions - mitigation of climate change- environmental policy - capacity development in sustainable energy supply	Energy	2009 -
Programm städtisch-industrieller Umweltschutz / Program environmental protection	**Mexico**	- waste management - wastewater management - reduction of air pollution- mitigation of emissions - sole protection through hazardous waste management	Environmental Protection	2010 -
Regional Program on Adaptation to CC in the Andean Region	**PE, BOL, ECU, COL**	- adaptation to climate change - mainstreaming of policy on cc - agriculture - watershed management	Agriculture	2009 -
Promotion of environmental technologies	**Chile**	project to develop environmental technologies	Waste	1997 - 2004
Project for the conservation and sustainable management of the native forest	**Chile**	conservation and sustainable management of native forests	Forestal	1997 - 2006
Strategic Project of integrated management of hydrographic basins	**Chile**		Environment/ water	2008 - 2009
Seminars and Conferences, projects before 2006 (with CEPAL)	**Chile and others**		Sustainable and equitable Globalization	2006 - 2008

KfW				
Programa de energies renovables y eficiencia energética / RE and EE Program	**América Latina**		Electricity generation / Renewable Energies	12/2007
Programa de energies renovables y eficiencia energética / RE and EE Program	**BCIE 2**		Electricity generation / Renewable Energies	12/2007
Programm Erneuerbare Energien und Energieeffizienz Ko-finanzierung mit IDB / RE and EE Program and Cofinancing with IDB	**BCIE**		Electricity generation / Renewable Energies	12/2007
Debt for Nature Swaps: Sistema Nacional de Areas Protegidas	**Bolivia**		Biodiversity	1995 - 2008
Management of Nature Conservation Areas and their Buffer Zones / Biodiversity and Protected Areas	**Bolivia**	Management of Nature Conservation Areas and their Buffer Zones	Biodiversity	2002 - 2009
Erneuerbare Energien / Renewable Energies	**Bolivia**		Electricity generation / Renewable Energies	12/2003
Program Biodiversity and protected areas	**Bolivia**		Biodiversity	06/2007
Natural Resources Policy Programme	**Brazil**	Strengthening of an Integrated Environmental Management System in Acre, Amazonas, Pará, Rondônia	Biodiversity	1996 - 2008
Natural Resources Management of the Amazonian Várzea Floodplains – ProVárzea	**Brazil**		Biodiversity	2002 - 2008
Protection of the atlantic forest in Rio Grande do Sul	**Brazil**		Biodiversity	2002 - 2009
Protection of Mata Atlântica in Santa Catarina	**Brazil**		Biodiversity	2002 - 2009
Protection of Mata Atlântica in Rio de Janeiro	**Brazil**		Biodiversity	2002 - 2009
Protection of tropical forest in Mata Atlantica	**Brazil**		Biodiversity	09/2002
Protection of tropical forest in Minas Gerais I	**Brazil**		Biodiversity	2002 - 2007
Protection of tropical forest in Minas Gerais II	**Brazil**		Biodiversity	2009 - 2012
Promanejo – Forest reservation	**Brazil**		Biodiversity	11/2003
Demonstration project in Mata Atlantica	**Brazil**		Biodiversity	2004 - 2010
Regional protection area in Amazonian	**Brazil**		Biodiversity	2005 - 2009
Establishment of Ecological Corridors in Amazonia and Mata Atlântica	**Brazil**		Biodiversity	2006 - 2010
Fund for nature protection area in Amazonian	**Brazil**		Biodiversity	project term: 2008 - 2011
Sustainable Forestry Programme	**Ministério do Meio Ambiente, Brazil**		Biodiversity	Project in preparation (as per 1/2008
Regeneratives Energie- / RE and EE	**CAF 3**	Interest Subsidy	Electricity generation / Renewable Energies	09/2006
RE/EE I: Geothermie-erkundungsprogramm / RE/EE: Geothermy	**Chile**	Geothermy	Electricity generation / Renewable Energies	12/2007
Programm RE/EE II: Machbarkeitsstudien / Program RE/EE: Feasibilitystudies	**Chile**		Electricity generation / Renewable Energies	07/2008

Sustainable Management of Natural Forests	**Chile**	Phase II Phase III	Biodiversity	2002 - 2007 In preparation: 2008 - 2013
Forestry as Production Alternative for the Coffee Board Area	**Colombia**		Biodiversity	2007 - 2014
Biodiversity Component	**Colombia**	Part of the project Forestry as Production Alternative for the Coffee Board Area	Biodiversity	2008 - 2012
Forestry Project Huetan Norte, (Phase I + II)	**Costa Rica**		Biodiversity	2003 - 2011
Programme Conservation and Management of Natural Resources (GTZ/KfW)	**Dominican Republic**		Biodiversity	2001 - 2007
Protection on natural resources Alto Rio Yaque del Norte II	**Dominican Republic**		Biodiversity	12/2004
Sustainable management and protection of natural resources frontier region	**Dominican Republic**		Biodiversity	2007 - 2010
Forest Conservation Chongon-Colonche	**Ecuador**		Biodiversity	1998 - 2010
Feasibility studies RE Galapagos	**Ecuador**		Electricity generation / Renewable Energies	05/2003
RE Galapagos	**Ecuador**	Investment	Biodiversity	2007 - 2009
Tropenwaldschutz Morona – Pastaza	**Ecuador**		Biodiversity	2004 - 2011
Tropical Forest Protection Gran Sumaco	**Ecuador**	Tropical Forest Protection Gran Sumaco	Biodiversity	1998 - 2007
Programme "Sustainable Natural Resources Management (GESOREN)", Phase II	**Ecuador**	Including "Tropical Forest Protection Gran Sumaco"	Biodiversity	2004 - 2011
Tropical Forest Protection	**Honduras**		Biodiversity	2006 - 2010
Protection of biosphere reserve	**Honduras**		Biodiversity	2004
Conservation Areas I + II	**Peru**	Support to Tropical Conservation Areas	Biodiversity	1998 - 2006 2004 - 2009
Debt for Nature Swaps – Alternative Development and Forest Conservation in Alto Mayo	**Peru**		Biodiversity	1999 - 2008
Debt for Nature Swaps – Nature Resources Management Morona-Pastaza	**Peru / Ecuador**	Binational Plan for Peace and Development Perú-Ecuador	Biodiversity	2003 - 2012
Resource Conservation Programme Jaen-S. Ignacio-Bagua	**Peru**		Biodiversity	2003 - 2008
Facilitating of tropical forest protected areas Profonape II	**Peru**		Biodiversity	06/2004
Bi-National Tropical Forest Conservation Programme	**Peru**		Biodiversity	2007 - 2011
Agro-environmental environmental program Ceja de Selva	**Peru**		Biodiversity	In preparation

InWEnt				
Political coherence for a sustainable energy policy in Mexico, Central America, and Colombia	Specialists and executive staff from governmental and non-governmental organizations	Promoting political coherence on renewable energy sources, energy efficiency, climate protection, sustainable finance change management and Leadership	Framework for energy and climate policies	01/2005 - 12/2010
Climate protection by supply of sustainable energy in MERCOSUR countries	Specialists and executive staff from governmental and non-governmental organizations	Promoting energy efficient architecture/ sustainable urban development, wind energy, utilization of renewable energy sources, grid-bound (power)systems/ network integration, rural development, political dialogue on energy	Renewable energy sources / energy efficiency	01/2005 - 12/2008
International Leadership Training (ILT) Sustainability Management Latin America	Specialists and executive staff from private sector	The participants are developing transfer projects on energy and energy efficiency in their home countries.	Renewable energy sources / energy efficiency	06/2005 - 06/2010
Capacity Building for a social and environmentally sustainable community & city development in Central America	Staff of communal administration	Strengthening of communal Environment and Planning Departments	Communal Administration	01/2006 - 12/2010
Alumni network Sustainable Business development Latin America"	Specialists and executive staff from private sector and vocational training institutions	Establishment of the network, promotion and integration of economical, ecological and social sustainability in the private sector and vocational training (e.g. implementation of measures to reduce the use of energy)	Renewable energy sources / energy efficiency	01/2007 - 12/2009
Dialogues with "New Drivers of Global Change"	Policy-Makers, Experts and Stakeholders	Informal dialogue boards on global public goods: sustainable urban development, further development of clean development mechanisms in outreach states, global climate protection and energy policy, energy-efficient architecture and building design	Framework for energy and climate policies	01/2008 - 12/2010
Political coherence for a sustainable energy policy in Mexico, Central America, and Colombia	Specialists and executive staff from governmental and non-governmental organizations	Promoting political coherence on renewable energy sources, energy efficiency, climate protection, funding, change management and leadership	Framework for energy and climate policies	01/2008 - 12/2010
Management of municipal water utilities	Specialists and executive staff from water distribution company	Promoting a regional dialogue on the effects of climate change on Andean glaciers and on urban water supply	Water sector	01/2008 - 12/2010
Managing Global Governance	Young professionals from ministries, think tanks, etc.	Capacity Building on Global Governance in environmental and climate protection	Framework for energy and climate policies	01/2009 - 12/2013
Technology cooperation for energy efficiency and renewable energy source in Mexican enterprises	Specialists and executive staff from private sector	Promotion of innovations and technologies for a more efficient energy use and for the use of sustainable energy sources in Mexican companies, improving the framework in the energy sector, reduction of emissions	Technological cooperation	01/2008 - 12/2011
Regional policies to promote sustainable forest development in the Amazonas region	Specialists and executive staff from governmental and non-governmental organizations	Protection of tropical forest, sustainable forest management and land use, adaptation of regional policies and managerial approaches to changing climate conditions.	Protection of tropical forests	01/2006 - 12/2008
Rural development and resource management in Andes countries	Specialists and executive staff from governmental and non-governmental organizations	Integrated management of drainage areas, adaptation of planning to glacier melting	Integrated agricultural development and resource management	01/2005 - 12/2008

DEG				
Actions since 2002				
Sinersa	**Peru**	Power generation from Hydro	Renewable Energy	2002
Donajulia	**Costa Rica**	Power generation from Hydro	Renewable Energy	2006
Enercon	**Brazil**	Power generation from wind	Renewable Energy	2006
Sinersa A	**Peru**	Power generation from Hydro	Renewable Energy	2006
Ecosa	**Ecuador**	Power generation from Biomass	Renewable Energy	2006
ERSA	**Brazil**	Renewable project development	Energy	2007
Reybanpac	**Ecuador**	Power generation from Hydro	RE / Agriculture	2007
Palca	**Nicaragua**	Biofuel use in transport	RE / Transport / automobile	2007
BSMH	**Mexico**	Power generation from biomass	RE / Agriculture	2006
Suganc	**Nicaragua**	Power generation from biomass	RE / Agriculture	2006
CIFI / LPTIII	**cross regional**	Renewable infrastructure financing	RE / Banking / Finance	2006
Future actions				
Bioenergy	**Uruguay**	Power generation from Biomass	Renewable Energy	2008
RIMA	**Brazil**	Energy efficient transport	RE / Transport / automobile	2008
Cluster	**cross regional**	Renewable power generation, efficiency increase, sustainable agriculture	diversified	future

CIM

The Program "Integrated Experts" transmits specific professional expertise to host-institutions in partner countries. The host-institutions are of relevance to the respective national development-efforts. Helping them to close yet existing gaps of specific expertise by means of the cooperation of an Integrated Expert thus represents a direct contribution to development in the respective partner country. The host-institution employs an Integrated Expert (may be a German- or EU-national) on the basis of a local work-contract, pays him a monthly salary and further benefits pertaining to a regular employer-employee-relationship. The Integrated Expert thus turns into a national employee for a certain amount of time (normally two years). He/she is "integrated" in the structure of the employing host-institution – hence the designation of "Integrated Expert." CIM supports the host-institution by bolstering the respective national salary by means of monthly topping-up payments to the Integrated Expert. Between the years 2002 and 2008 (30 october) CIM has fielded and financially supported countries in Latin-America by an annual average of 36 specialists in the field of climate-change. In the category of "climate-change" experts in forestry, sustainable management of forest-resources, renewable energies, energy-efficiency, agricultural adaptations to climate-change, are as well included, as specialists in climate-protection or climate-change monitoring. Roughly 25% of all Integrated Experts co-financed by CIM in Latin-America thus more or less directly contribute to various aspects of "climate-change".

Actions 2002-2008

Argentina	19 experts
Bolivia	22 experts
Brazil	20 experts
Chile	30 experts
Colombia	12 experts
Costa Rica	20 experts
Dominican Republic	16 experts
Ecuador	41 experts
Honduras	15 experts
Mexico	26 experts
Nicaragua	15 experts
Peru	16 experts
Salvador	1 expert

DED			
Proliferation of sustainable systems of land use	**CHL, BOL, BRA, ECU, PER, GUA, HON, NIC, DOM**	Proliferation of sustainable Agro-forestry systems and ecological cropping systems	2002 - 2008 (CHL until 2006) (DOM until beg. 2008)
Proliferation of sustainable systems of land use	**CHL, BOL, BRA, ECU, PER, GUA, HON, NIC, DOM**	Advisory service about sustainable cultivation of the forest (social and peasant forest management), forest-certifications Advisory service to forest-based value-creation chain, among others certification of firewood from sustainable (natural) forest management	
Renewable Energy – agrarian fuel	**Peru, Honduras**	Pilot project for the decentralized power supply (with CFC Common Fund for Commodities)	Since 2004
Renewable Energy – agrarian fuel	**Ecuador**	Preparation of a study for the ECU Energy ministry about the possibilities to substitute fossil energy with agrarian fuel	Since 2004
Renewable Energy – agrarian fuel	**Brazil**	Support of peasants (small farmers) in the Northeast of Brazil for the fabrication of vegetable oil from ricinus to produce biodiesel	Since 2004
Advisory Service about the CDM mechanism – emission trading	**Bolivia**	Assistance with the implementation of a reforestation project with peasants in the frame of emission trading (undertaking organisation is the fundación CETEFOR through PRISA and private financing)	2002 - 2008
Advisory Service about the CDM mechanism – emission trading	**Peru**	Advisory service for the city of Lima during the planing and preparation of a project of the CDM in the area of the restoration of informal waste disposal sites	2002 - 2008
Household energy and energy efficiency	**Bolivia**	Advanced training of promoters for the implementation and proliferation of energy-saving stoves (with the GTZ and Coffee-producer-organisations)	2002 - 2008
Household energy and energy efficiency	**Peru**	Advisory service of the NGO "Asociación para la Investigación y el Desarrollo Integral" (AIDER) for the installation and operation of facilities for the more efficient and environmental friendlier fabrication of charcoal/vegetable coal from wooden waste	2002 - 2008
Advisory Service about the CDM mechanism – emission trading	**Ecuador**	Project "Bio fuel Galapagos – Substitution of fossil fuel with bio fuel for the production of energy on the Galapagos islands" (oilsupplying plant is the Jathropha)	2002 - 2008

Others				
Project Disaster Risk Management and food security	**Bolivia**	Protection of productive bases	Agriculture	2002 - 2007
Improvement of Energy Access	**Bolivia**	Improved access to energy	General	2005 - 2011
Capacity building	**Bolivia**	Awareness on Climate Change Watershed Managers in Andean Region	Decision makers	2006 -?
REDD	**Bolivia**	Bolivian Government: Preparation to access Fund on Climate Change	General	2007 -
Adaptation on Climate Change	**Peru, Ecuador Bolivia**	Improved Water Access and Forestation	Political institutions and decision maker	2009 -?
Clean Air Project	**Costa Rica**	Improvement of the air quality and reduction of the emissions of the transport sector in Costa Rica	Transport, Health, Environment	2000 - 2006
Sustainable Management of natural resources in the conservation area of Osa	**Costa Rica**	Protection of the environment and natural resources by means of a sustainable economic development	Environment	2003 - 2006
Credit line for environmentally oriented investments of small and medium sized enterprises	**Costa Rica**	Credit line for micro, small and medium sized enterprises to invest in their production processes to reduce environmental pollution	Environment	not yet implemented
Conference of Climate Change	**Costa Rica**	Strengthening of regional cooperation in Latin America and the Caribbean with regard to climate change implications.		March 12, 2009

B. Federal Ministry of Education and Research (BMBF)

Title	Beneficiary	Specific objective	Date beginning /end
BLUMEN	**Brazil**	Biodiversity in Integrated Land-use Management for Economic and Natural System Stability in the Mata Atlântica of Rio de Janeiro, Brazil	10/2002 - 12/2005
Earth biota and Biogeochemistry in the coastal rainforests of South Brazil -	**Brazil**	Evaluation of the diversity and function of the earth/ground under anthropological influence (Mata Atlântica, Paraná)	10/2002 - 07/2006
EULANEST	**ARG, BOL, BRA, CHL, CUB, DOM, MEX**	European-Latin American Network for Science and Technology. EULANEST intends to promote an co-ordinate research cooperation among EU Member States and Latin American Countries	10/2006 - 9/2010
International master program for experts in Mexico,	**Mexico**	Environmental protection, resource management, sustainable energy systems	01/2008 - 12/2012
Internal dynamics of the rainforest, specific animal-plant-interactions	**Brazil**		10/2002 - 07/2006
Peasants (small farmers) in Amazonia: correlations between ecosystem and social system concerning the utilization and protection of the tropical forests	**Brazil**		02/2001 - 12/2003 01/2004 - 07/2004
MADAM II: Mangrove Management an Dynamics	**Brazil**	Establishment of the exploratory focus ecology of the tropical coastal area	07/1999 - 06/2002 07/2002 - 12/2005
Mata Atlantica	**Brazil**	Perturbance, Fragmentation and Regeneration of the atlantic Rainforest in the Region of Pernambuco in the Northeast of Brazil	10/2002 - 07/2006 08/2006 - 07/2009
Mata Atlantica	**Brazil**	Internal Dynamics of the rainforest; specific animal-plant-interactions	08/2006 - 07/2009
Mata Atlantica: Joint project SOLOBIOMA II Earth biota and Biogeochemistry in coastal rainforests of South Brazil	**Brazil**	– Appraisal of the ecosystematic quality of secondary forests and their potentials to protect the biodiversity and coordinate the cooperation Subordinate project: beetles as indicators and development of an integrated evaluation concept for the classification of secondary forests of Mata Atlantic Subordinate project: The importance of earth organisms for ecosystematic processes and the regeneration of the Atlantic rainforests of Brazil	08/2006 - 07/2009
Secondary forest fallow ground vegetation in the cultural landscape of the Eastern Amazon area	**Brazil**	Analysis of its Function and susceptibility to manipulation	09/1999 - 12/2003
SHIFT-Project	**Brazil**	Near-natural reforestation of the southern brazilian monkey puzzle/ hoop pine forest - development of sustainable agro-forestry operations	08/1997 - 12/2001
SO 170 – Tropical circulation	**Brazil, France, USA**	Oceanographic expedition to the western tropical atlantic and successive processing/digestion of the data collected	03/2003 - 12/2005
AQUASOL	**Brazil**	Joint Project: Development, construction, optimization and field test of a novel solarthermic installation for the desalination of seawater with multi-stage heat recovery	04/2005 - 12/2008
AQUASOL	**Brazil**	Joint Project: Development, construction, optimization and field test of a novel solarthermic installation for the desalination of seawater with multi-stage heat recovery	04/2005 - 12/2008
Today's ecology and former climate: Tagelus plebeius (shallow water shell)	**Argentina**		02/2003 - 02/2006
Joint Project: sustainable management of water and waste water in urban growth regions in consideration of the dealing with climate change – concepts for Lima Metropolitana (Perú) -	**Peru**	Subordinate project 5:Economic evaluation of the approach to the pricing of water Subordinate project 3: Climatic and water balance (hydrology) modelling Subordinate project 1: Coordination and macro-modelling Subordinate Project 2: Establishment of Competence	06/2008 - 05/2013 06/2008 - 05/2013 06/2008 - 05/2013 06/2008 - 05/2013
Biological crust/incrustation/ and vegetation at the border of the Atacama desert under the influence of climatic variability	**Chile**		01/2007 - 12/2007
Vegetation-ecological and paleoecological investigation of moss in the higer Andes	**Argentina**		02/2007 - 12/2009
High-resolution sclero-chronological methods to apply to paleoclimate reconstruction in Patagonia	**Argentina**		03/2008 - 03/2010
Urban climate and city planning against the background of global warming	**Brazil**		07/2008 - 07/2010

1 IDB – Interamerican Development Bank; 2 CEPAL- Comisión Económica para América Latina; 3 RE – Renewable Energy, EE – Energy Efficiency; 4 BCIE – Banco Centroamericano de Integración Económica; 5 CAF – Corporación Andina de Fomento.

Italy

EuropeAid

Actions financed by Italy
Ongoing cooperation projects in the field of environment in Latin America and the Caribbean
(Information updated November 2009)

El Salvador (Guatemala and Nicaragua) – "Italy-Central America University network for the analysis and evaluation of natural danger". Approved in October 2008, upon proposal by the Faculty of geology of the University of Palermo. Total value € 1,694,580, of which € 987,380 (58.3% of the total) provided by the Directorate General for Development Cooperation of the Italian Ministry of Foreign Affairs. Goal: assistance in land management, taking into account the particular environmental vulnerability of the Central American region.

Bolivia – Voluntary contribution to FAO (€ 738,000) for the programme "Rehabilitation from natural disasters 2006/2007 and prevention of similar future disasters in Bolivia", with a special regard to floods. Approved in July 2007.

Brazil – "Technical training on possible alternatives to the use of fire in the process of sustainable development of the Amazonian Region". Total value € 990,000. Nearly completed. Goal: helping fight the fires that many times during the year destroy hectares of the Amazonian forest; the project is implemented in agricultural areas, inhabited by dwellers from favelas of North-Eastern Brazil, in most cases deprived of the necessary agricultural knowledge/skills to keep the land productive. The methodology used throughout the implementation of the project, given the good results so far achieved, was particularly appreciated by the Brazilian Government and by the Minister of Agriculture, the institutional and technical counterpart of the Italian implementing Authority (the Directorate General for development cooperation of the MFA). A third phase of the project has been financed for 600,000 euro with a view of involving other countries in the Amazonian Region like Bolivia. A project in Bolivia is expected to be approved in 2010.

Brazil – "Preservation and valorisation of the phyto-genetic resources of the species of agro-food and industrial relevance" (biodiversity programme). Total value: € 4.3 millions. Nearly completed. Implemented by Istituto Agronomico per l'Oltremare (IAO). Goal: protecting food safety of the beneficiary population through the safeguard and sustainable utilization of Brazilian biodiversity, of which the local communities hold the main responsibility.

Ecuador - Environmental multi-bilateral programme for the safeguard of Galapagos Islands. Total value: € 2.2 million, implemented by UNDP for 1,149,000 USD. By the end of the first year of activity, it was decided to continue through direct management by the IDC. The new phase is currently being started.

Caribbean Islands – Contribution to UNDP for the "Fight against poverty through the reduction of environmental vulnerability of the Caribbean populations". Approved in September 2008. The initiative stems from the United Nations 2008/2011 regional strategy for small islands of the Caribbean. Goal: enhancing, by 2010, the regional capacity to manage environmental hazard. The project consists of two components: one implemented by the Italian Civil protection Authority and the other by UNDP. So far, only the first phase of the UNDP component of the project, related to civil protection and research activities, was financed by the Development Cooperation Authority, for an amount of € 3.5 millions.

The Netherlands

EuropeAid

Actions financed by The Netherlands
(Information updated November 2009)

The Dutch Ministry of Foreign Affairs is dedicated to an international approach to environmental problems in developing countries. The Netherlands spends about 0.1% of its Gross Domestic Product (GDP) on environmental protection in developing nations. This amount is in addition to the 0.7% GDP The Netherlands already contributes to poverty reduction.

The Netherlands' development policy on climate aims to:

- Help countries offset climate change (adaptation). This is necessary because negative effects of climate change, such as hurricanes or droughts, can seriously affect economies. Equally, climate change also makes poverty reduction more difficult and more expensive.
- Take climate hazards into account in terms of development programmes and projects. This way you can avoid investments being damaged, yielding less than planned or, even, unintentionally increasing people's vulnerability.
- Give more people in developing countries access to renewable energy (e.g. solar, wind, hydro and geothermal power).
- Assist countries in developing the REDD mechanism. This enables them to participate in a future mechanism to protect the carbons stocks in forests.
- Support developing countries in their participation in the UNFCCC negotiations.
- Build up developing countries' capacity to use the Clean Development Mechanism (CDM). The objective is to help formulate projects that produce less CO_2 while also contributing to poverty reduction and sustainable development.
- Pursue active involvement in the international climate debate, for example at UN and EU level. The objective is to exchange adaptation experiences with other donors, look for coherence and, where possible, act in concert.

Programmes and activities:

- **Program of Renewable energy in developing countries.** The Dutch government made available a budget of 500 million Euros for a program on renewable energy in developing countries for the period 2008-2011. This program includes direct investments in renewable energy and the production of sustainable biofuels.
- **Bilateral programs in Bolivia, Colombia, Guatemala and Suriname.** The bilateral programs support the development of national climate change policies and programs, and the mainstreaming of climate change in sectoral and thematic policies, research and dialogue as well as harmonization and alignment of aid on climate change. See for details of the bilateral programs the information below.
- **Economics of Adaptation to Climate Change 2008-2010.** The Economics of Adaptation to Climate Change study has two broad objectives: to develop a global estimate of adaptation costs for informing the international community's efforts to help the most vulnerable developing countries meet adaptation costs, and to help decision makers in developing countries assess the risks posed by climate change and design strategies for adaptation. The first objective is being pursued through the global track, and the second through the country track in partnership with the governments of Bangladesh, Bolivia, Ethiopia, Ghana, Mozambique, Samoa and Vietnam. Duration 2008-2010; Contribution of The Netherlands to this study: US$ 3,906,000. For further details see: http://beta.worldbank.org/content/economics-adaptation-climate-change-study-homepage
- **RC Climate Centre / Dutch Red Cross - Preparedness for Climate Change 2006-2010**. The objective of the RC Climate Centre is to support national associations, the federation and other aligned associations in their activities directed at the reduction of the negative impact of climate change and extreme weather circumstances. The aim of the programme is to diminish - in the long run - the vulnerability of people for the negative effects of extreme weather and climate change. The programme will result in 35 national RC associations with knowledge of climate risks that will enact activities to control these risks. Enactment will (amongst others) take place in the Caribbean and Central America. Duration 2005-2010; contract amount € 2,564,474 (for entire programme, including second phase). See for details: http://www.climatecentre.org
- **GEF/UNFCCC Least Developed Countries Fund for Climate Change (LDCF).** The LDCF was established in 2001 and is managed by the GEF. The LDCF has been set up as a component of the Marrakech agreements, concluded in 2001. The objective of the LDCF is to support the least developed countries (Haiti in the case of Latin-American Countries) in drawing up and implementing the National Adaptation Programs of Action (NAPAs). These NAPAs serve as "simplified and direct channels of communication for information relating to the urgent and immediate adaptation needs" of the concerning developing country. The process of drawing up and implementing the NAPA contributes to capacity development in the developing country in the area of adaptation to climate change. Termination date: 30/06/2009; Netherlands Contribution € 10,200,000 (for entire programme). See for details: http://www.gefweb.org/uploadedfiles/LDCF/LDCF_insert_LDCF.pdf

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- **IVM- ADAPTS Adapting to Climate Change at the Local Scale.** Aim is to enlarge capacity in order to adapt water management- and policy, local development plans and investment decisions to climate change. The proposal includes an inception phase in seven river basins and an implementing phase in a maximum of three of these. In Latin-American countries it concerns São Francisco (Brazil) and Ocoña (Peru). Duration 01/09/2007-31/10/2011; contract amount approximately € 50,000 for Brazil and € 400,000 for Peru. See for details: http://www.bothends.org/index.php?page=2&projectId=24
- **Carbon crediting for forest communities.** Several Dutch institutes are responsible for the community carbon forestry programme, the objective of which is to develop a method for sustainable forestry and prevent deforestation, as part of the Kyoto Protocol. Total contribution for the period 2007 – 2009: € 1,254,605. For details see: http://www.communitycarbonforestry.org

Countries where The Netherlands is active

The Netherlands, with the assistance of its embassies, is involved in the environment sectors of Bolivia, Colombia, Guatemala and Surinam.

Bolivia

Projects and initiatives

- Support for the National Program for Climate Change;
- Support for the integrated water policy of the Ministry of Water;
- Support for the national multi-year plan of Vice-ministry of environment, bio-diversity, climate change;
- Support for the implementation of forest policy and improved use of forest products;
- Support for the development of decentralised REDD programs ('REDD Indigena');
- Protection of national parks and reducing of illegal cutting;
- Leading the donor dialogue and the harmonization of aid on environment.

The embassy in La Paz has approximately € 9.5 million available per year for environment. As both The Netherlands and Bolivia want to give more attention to the environment, this budget will increase to € 12 million in 2011.

Colombia

In 2008, The Netherlands provided € 11 million to Colombia for environmental support. In previous years, aid totalled, € 10.5 (2007), 12.22 million (2006), € 7.4 million (2005) and € 9.51 million (2004).

In the environment sector The Netherlands is an important donor, together with the World Bank, the Interamerican Development Bank and the Global Environmental Facility. In May 2007 Colombia and The Netherlands signed an agreement for sectoral support to the environment programme.

Objectives of this programme:

- To support the vice-ministry of environment as national environment authority and executive agency in formulating policy for environment management.
- To incorporate and balance the environment agenda for the countryside and the urban areas.
- To stimulate an environment policy which aims at the prevention of social problems as a result of environmental degradation, and with special attention to social equality and spatial planning, as a contribution to peace building.

In March 2009 the programme was positively evaluated by the London based Overseas Development Institute (ODI). The following results where mentioned:

- Mainstreaming of the environmental agenda with the financial authorities of the country and important efforts of greening the financial system.
- The declaration of protected areas together with indigenous people.
- The adaptation of national biodiversity policy to make it "climate change proof."
- Formulation of a national plan for integrated water resources management.
- Certification procedures according to international standards for biofuels in place.

The programme corresponds with the Development Policy Loan of the World Bank. The common policy dialogue is based on the results of the national environment policy and additionally The Netherlands achieved more attention for the possibilities of REDD for the country and the conservation of the Colombian Amazon.

The Ministry of Environment coordinates the support of donors and multilateral agencies to bring these together with the national policy.

Guatemala

The Netherlands is Guatemala's most important bilateral donor in the environmental sector. From 2007 onwards the Dutch Embassy has provided approximately 7.5 million Euros per year to Guatemala for environmental support.

The Netherlands cooperation programme comprises of:

- Introduction of sectoral approach in the environment and water sector;
- Support for development of the first sectoral plan, including climate change;
- Lead donor on harmonization and dialogue with government;
- Strengthening of key governmental environmental institutions;
- Programme on incentives for reforestation for small farmers;
- Regional projects promoting integrated management of natural resources, including water;
- Promotion of environment at the political agenda; and
- Fight against environmental impunity.

Suriname

In 2006, The Netherlands provided € 3.81 million to Surinam for environmental support. In previous years, aid totalled € 4.78 million (2005) and € 2.61 million (2004).

Through its support to the environment sector, The Netherlands aims to build Surinamese capacity in environmental management and integrated water management. Aid to international environmental organizations is channelled through project financing, which goes mainly to the United Nations Development Programme (UNDP) and the World Wildlife Fund (WWF). The focus of WWF Guiana's is on sustainable forest management, managing protected nature areas, freshwater management and reducing the environmental impact of small-scale gold mining.

The Netherlands is involved in drawing up sector policy, capacity building for environmental mangement and integrated water management and also supports partnerships between Dutch and Surinamese organizations, universities and ministries. (The Dutch National Institute for Public Health and the Environment (RIVM), the Ministry of Agriculture, Nature and Food Quality, the Ministry of Housing, Spatial Planning and the Environment, and the Ministry of Transport, Public Works and Water Management all have ties with Surinam.) UNDP concentrates mainly on capacity building for the implementation of UN environmental conventions signed by Suriname.

There is hardly any harmonization of donor efforts. Cooperation is mainly project-based, in part because an overarching national environment policy is still being developed.

- Various programmes have boosted project management skills (record-keeping, management) and specialist knowledge. Several public and semi-public bodies and NGO's have benefited from capacity building support to the Suriname Conservation Foundation.
- Through financing of the "Capaciteitsfonds Bos en Natuur" (managed by Tropenbos International Suriname) the Dutch Embassy supports the strengthening of the forest and nature sector.
- Capacity building of the government, industry and other stakeholders in the possibilities of Clean Development Mechanisms, through financing of the project "Capacity Development for Clean Development Mechanism".
- The Netherlands co-hosted the international experts meeting on financing for Sustainable Forest Management in September 2008, which was a Country-Led Initiative in support of the United Nations Forum on Forests (UNFF).
- An analysis was made of the vulnerability of regions and sectors to the consequences of climate change. The results are incorporated in policy e.g. a Climate Change Action Plan for the Coastal Region; a National Climate Change Action Plan is being formulated. Suriname ratified the Kyoto protocol.
- In addition to the Action Programme for the Non-Urban Environment, the National Forest Management Plan and National Biodiversity Strategy have been completed and associated action plans are written.
- The Dutch embassy supported a study demonstrating the potential of wind-generated power in northeast Suriname.
- A study was carried out into the feasibility of small-scale reforestation activities financed through CO_2 emissions trading. It was found that this type of approach would not be profitable, as the implementation and operational costs are too high.

Spain

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Actions financed by Spain
(Information updated November 2009)

1. Spanish activities in LAC region in the field of climate change

- **Background**

The Iberoamerican Climate Change Bureau Network (RIOCC in its Spanish initials) was created, in 2004 with the support of the Iberoamerican Conference of Nations (through its Ministers of Environment Forum), with the aim to deal with, in a widespread approach, climate change matters.

Climate Change Offices of 21 countries belong to the RIOCC: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Portugal, Spain, Uruguay and Venezuela.

The RIOCC objective is to guaranty a permanent dialogue which will allow knowing better the priorities, difficulties and experiences in the region. The working program establishes, among other, activities, in the following sections: research and systematic observation, impacts and adaptation, clean development mechanism, capacity building, institutional reinforce, education and awareness, climate change and developing aid, and cooperation between public and private sectors. The RIOCC gets together regularly once a year, with its agenda structured according to the most important issue in the international negotiations and depending on the priorities identified in the region.

- **Recent Adaptation and Mitigation projects and activities identified in the region being developed**

Relevant projects and activities in the field of climate change, both in mitigation and adaptation areas, are being developed in the Iberoamerican region with the support of the Government of Spain.

Concerning Adaptation, the "Iberoamerican Programme on Adaptation to Climate Change" (PIACC in its Spanish acronym) is one of the more relevant initiatives that are being developed on the framework of the RIOCC.

The PIACC was conceived more than three years ago, during the debates in the workshop on Adaptation that took place in the framework of the II Annual meeting of the RIOCC (Antigua, Guatemala, October 2005). Some of the main conclusions of a first analysis show that there is unanimity in the region in considering hydro resources a priority sector in the needs to adapt to climate change. Following it there are the human health and agricultural sectors.

RIOCC is one of the organizations that have been identified by the UNFCCC as a potential contributor to the objectives of its Nairobi Work Programme on impacts, vulnerability and adaptation to climate change.

Some of the most relevant activities in progress in the framework of the PIACC are:

→ Support for systematic observation and research on climate change.

The regional plans of the Global Climate Observation System (GCOS), which cover Iberoamerica are a framework to develop this specific objective of the PIACC. Given the important activity in this field that is being developed by the Iberoamerican Conference of Meteorological and Hydrological Directors, the RIOCC keeps a close cooperation with this network with the view to strengthen the implementation of the Regional Plans of the GCOS.

In addition, Spain regularly contributes to the so-called GCOS Cooperation Mechanism, whose objective is to give an answer to the most urgent and immediate needs in the field of systematic climate observation, being Latin America its most prioritised region.

→ Promotion of exchange and dissemination of knowledge, experience, tools, and methods.

Currently there have been planned and/or developed various projects and activities with regional interest with common methodologies and tools, among them the following:

- Project for the vulnerability assessment of Iberoamerican coastal areas facing climate change.
- Cooperative Project for Mitigation and Adaptation to Climate Change in the Sustainable Forest Management in Iberoamerica (MIA project, involving the network of Iberoamerican National Institutes for Agricultural Researches).
- Training activities for the use of regional climatic scenarios, leaded by Brazil and with the aim to promote the use of the Eta/CPTEC regional climate model in Iberoamerica.
- Workshop to analyse and assess adaptation projects in progress or already carried out in the region, and the effectiveness of the adaptation measures implemented.

In addition, to the regional activities, another basic pillar of PIACC and RIOCC is to support the composition of a portfolio of climate change projects in both mitigation and adaptation areas. The results and outcomes of these projects feed the base of knowledge and practises in the region. Spain provides funds to different UN Agencies and Development Banks Initiatives for financing concrete adaptation and mitigation projects:

→ Promotion of participative projects.

In 2006 Spain made a contribution of 2 million euros to the UNDP-UNEP Partnership within the Nairobi Framework where 1 million of this amount was orientated to Mitigation and Adaptation Projects in the Latin-American region:

- Integrating climate change risks into national development processes and UN country programming for the achievement of the Millennium Development Goals. Colombia, Nicaragua, El Salvador, Cabo Verde y Malawi.
- Leveraging Carbon Finance for Sustainable Development in Latin America and the Caribbean (UNDP-UNEP Partnership on Climate Change. Peru, El Salvador, Honduras and Uruguay

In 2007 Spain made an important contribution (more than 64 millions euros for 4 years) to the thematic window "Environment and Climate Change" of the Millennium Development Goal Fund1 (UNDP), there were 16 projects selected where six of them are in the Latin-American region:

Environment	Approved Joint Programmes - Title	Budget (USD)
Colombia	Integration of ecosystems and adaptation to climate change in the Colombian Massif	4,000,000
Ecuador	Conservation and Sustainable Management of the Natural and Cultural Heritage of the Yasuní Biosphere Reserve	4,000,000
Guatemala	Strengthening Environmental Governance in the face of Climate Risks in Guatemala	3,600,000
Nicaragua	Local / regional environmental management for the management of natural resources and provision of environmental services	4,500,000
Panamá	Integration of Climate Change Adaptation and Mitigation Measures in the Management of Natural Resources in Four Priority Watersheds of Panama	4,000,000
Peru	Integrated and adaptive management of environmental resources and climatic risks in High Andean micro-watersheds	3,900,000

1 In December 2006, UNDP and the Government of Spain signed a far-reaching agreement to establish a new fund to accelerate efforts to reach the Millennium Development Goals, and to support UN reform efforts at the country level. The Spanish Government has committed € 528 million to the MDG Achievement Fund (MDG-F), to be programmed between 2007 and end-2010.

- **Future Adaptation and Mitigation Programmes and Projects to be developed (2009-2010-2011) in the region**

→ Programme of work in Climate Change Adaptation and Disaster Risk Reduction

Spain has established a line of work with the Regional Office for the Americas of International Strategy on Disaster Reduction (ISDR), based in Panama, in order to identify and develop a set of activities in the region with a practical focus, including:

- Drafting guidelines for integrating climate change adaptation and natural disaster reductions.
- Enhancing the cooperation and information exchanges among national focal points on both fields, climate change adaptation and risk disaster reduction.
- Promoting the dissemination of selected material.
- Developing pilot projects demonstrative of how to integrate climate change adaptation and natural disaster reduction.

→ Programme of Work with the Economic Commission for the Latin-America and the Caribbean (ECLAC)

Spain has established a line of work with ECLAC in order to carry out a collaborative programme in the region aimed to develop and further analyse the socioeconomic impacts of climate change in the region and strengthen the institutional capacities of the region in the field of climate change (Seminars on: Programmatic and sectoral CDM, Reduction Emissions from Deforestation and Degradation, Regional climatic scenarios and Formulation of projects integrating Adaptation).

→ Contributions to UNEP and UNDP for the developing of Adaptation and Mitigation projects respectively.

- **Searching for synergies with regional initiatives and institutions**

RIOCC collaborates with different Regional Institutions and Development Banks sharing information, projects, methodologies, promoting collaboration, searching complementarities in order to take advantages and enhancing synergies. The RIOCC also collaborate with other Networks in the Region such as Iberoamerican Conference of Directors of the Meteorological and Hydrological National Services, the Iberoamerican National Institutes of Agricultural Researches, etc.

The more relevant Regional Institutions and Development Banks collaborating with RIOCC are as follows:

- CATHALAC: Water Centre for the Humid Tropics of Latinamerican and the Caribbean
- CATIE: Center for Tropical Agricultural Research and Education
- CIIFEN: International Research Center on el Niño
- IAI: Inter American Institute for Global Change Research
- ISDR: International Strategy for Disaster Reduction in the Americas
- CEPAL: UN Economics Comisión for Latinamerican and the Caribbean
- IDB: Interamerican Development Bank
- CPTEC: Centro de Previsão de Tempo e Estudos Climáticos
- CAN: Andean Community
- CAF: Andean Development Corporation.

RIOCC also collaborates with other international relevant organizations:

- UNFCCC: United Nations Framework Convention on Climate Change
- UNDP: United Nations Development Programme
- UNEP: United Nations Environment Programme
- WB: World Bank.

- **Frameworks for the strengthening of the institutional capacities.**

As a contribution to strengthen the institutional capacities Spain has established an on-line course on the international climate change regime, carbon markets and financial instruments, addressed to the staff of the regional climate change offices or other units dealing with climate change.

And, as mentioned above, Spain is working with ECLAC to carry out several seminars during 2009 (Programmatic and sectoral CDM; Reduction Emissions from Deforestation and Degradation; Regional climatic scenarios; and Formulation of projects integrating Adaptation) and will identify some more for 2010 and 2011.

- **Fostering information and communication activities**

RIOCC and PIACC have also the specific objective of promoting Communication, Education and Public Awareness (CEPA activities) in the region, and some outreach material, as brochures, pins... has been produced to disseminate and make known the initiatives and these activities.

Last December, a dedicated website on the RIOCC (www.lariocc.net) and the PIACC was launched as an information and exchange forum with relevant documents and links between members and with main regional initiatives.

- **Initiatives under the CDM and Goals in energy efficiency and deployment of renewable energy sources**

Spain has been directly supporting the development of CDM projects in energy efficiency and renewable energy in the region, prioritizing the investments and the development in this kind of projects against other options in multilateral funds.

The "Fondo Español de Carbono" (Spanish Carbon Fund), managed by the World Bank, has a capitalization of 220 million euros and its objective is focused on the acquisition of a minimum of 34 million tons of CO_2 eq. from CDM projects, giving special attention to the Latin-American Region, renewable energy and energy efficiency. Lately it has been launched a second tranche in the Spanish Carbon Fund; Spanish government is the only participant in this tranche with a contribution of € 70 million. The Iberoamerican Carbon Initiative, on the other hand, it is managed by the "Corporación Andina de Fomento" (CAF) and it is solely devoted to the development of CDM projects in the Region in order to obtain 9 million tons of CO_2 eq.

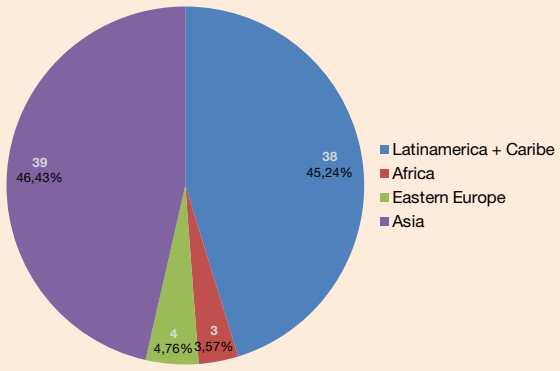
In this regards, and in relation with the mitigation activities in the context of the RIOCC, Spain has developed various activities related with the promotion of the Clean Development Mechanism and the identification of projects. Spain, in the framework of the RIOCC, has signed 17 Memorandum of Understanding (MoUs) with Latinamerican countries, with the aim to formalise the cooperation in order to start CDM projects, promote technology transfer and increase technical cooperation to improve host countries capacity.

The Spanish administration is jointly working with national public and private financial institutions in order to promote and design additional financial products to the Carbon Funds. These instruments promote Spanish investments in CDM and aim to trigger the promotion of renewable energies, technology transfer and deployments and the promotion of emission reductions generations. In this line there are several credit lines promoted by different financial institutions that are already active.

In addition there are several instruments to provide technical assistance, such as consultancy funds and Viability Study Funds. Spain is the major donor in the Carbon Finance Assist of the World Bank, with 5 million euros.

The Designated National Authority of Spain has been very active since it was launched in 2005, which has reflected the importance that CDM has not only for the Spanish government but also for the private sector. The DNA has approved, until today, 84 CDM projects that will generate an average annual 22,09 M T CO_2e and a total of 121,01 M TCO_2 e for the first commitment period. These projects reflect the Spanish strategic technological and geographical priorities, as 63% of the projects approved are renewable energy projects and 49% are located in the Latin American Region.

Regional distribution



With similar objectives but tailored to the field of renewable energy and energy efficiency the Instituto para la Diversification y el Ahorro de la Energía (IDAE) will launch the Iberoamerican Network of Energy Efficiency and Renewable Energy (Red Iberoamericana de Eficiencia Energética y Energias Renovables) with the view to strengthen cooperation and integrate key public promoters.

Spain has also put a lot of emphasis on afforestation and reforestation projects in the Clean Development Mechanism, as it can be seen in the investment made in the Biocarbon Fund and Forest Carbon Partnership Facility of the World Bank. Furthermore, the RIOCC cooperates with the FORMA Project, a capacity building programme for afforestation and reforestation CDM projects in Latin-American and the Caribbean.

Spain also participates in another multilateral fund, the Carbon Fund for Community Development that provides carbon finance to projects in the poorest areas of the developing countries. This fund includes in its portfolio projects developed in Latinamerican countries.

- **Promotion of new approaches to CDM and other initiatives**

Spain is also putting its efforts in giving financial, technical and political support to innovative initiatives such as programmatic CDM or sectoral approaches. Among those initiatives it has to be highlighted a joint initiative between the Iberoamerican Energy Regulators Association (ARIAE in its Spanish acronym) and RIOCC whose objective is to identify and choose concrete project proposals that could be presented as programmatic CDM in the energy sector backed by the RIOCC. This initiative has key partners such as the World Bank, energetic regulators and the Designed National Authorities (DNAs) from the host countries in a privileged working space such as the RIOCC.

Further more, Spain has also contributed recently to two new initiatives within the World Bank, where Latin-American countries could benefit from:

- "Carbon Asset Development Fund" for providing grants and otherwise supporting technical assistance to, inter alia participating developing countries and countries with economies in transition and to participating public and private entities located in these countries; the CADF would provide such grants and technical assistance for the development of emission reduction programs and creating the enabling environment to generate emission reductions;
- "Readiness Mechanism (Readiness Fund)" of the Forest Carbon Partnership Facility: Under this mechanism, the Facility intends to assist developing tropical and sub-tropical countries prepare themselves to participate in a future, large-scale system of positive incentives for Reduction Emissions from Deforestation and Degradation. This will include, but is not limited to: (i) determining a national reference scenario based on historical emissions from deforestation and degradation and, where needed and feasible, an assessment of how these emissions would evolve in the future; (ii) preparing a national REDD strategy; and (iii) establishing a monitoring system for emissions from deforestation and forest degradation.

Finally, another two relevant initiatives where Spain is also contributing are:

- The recently launched TECH4CDM project. The main objective of this project, financed by the European Commission but leaded by the Spanish Administration, is to promote selected renewable energy and Energy Efficient technologies in 5 Latin American countries, Mexico, Ecuador, Peru, Argentina and Chile, optimising the opportunities opened by the Clean Development Mechanism, and identifying potential small and large scale projects with the aim to support developers and EU companies to invest in the region.
- The Sustainable Energy and Climate Change Initiative (SECCI) in the Interamerican Development Bank: with the aim to support the LAC region in its urgent challenge to find economically and environmentally sound energy options. Its core objectives are to expand the development and use of renewable energy sources, energy efficiency technologies and practices, and carbon finance in the region, as well as to promote and finance climate change adaptation strategies that reduce the regions climate vulnerability.

2. Other Spanish activities related to climate change in LAC region in the field of water and biodiversity

WATER

Spain is working in the adaptation of water resources management in a climate change scenario, through the Conference of Iberoamerican Water Directors (CODIA, in its Spanish acronym), whose Technical Permanent Secretariat is responsibility of the Directorate General for Water (Ministry of Environment, and Rural and Marine Affairs). In this regard, the CODIA works mainly on capacity building and institutional reinforcement in the field of integrated water resources management in Latin America.

- **Background**

The CODIA was created as a support body of the Iberoamerican Forum of Ministers of Environment. It brings together the responsible agencies for water management of the 22 Latin American countries. It does not involve water services operators or private firms or academic agents, but public institutions and high-level political officials in each country. The CODIA represents a space for exchanging views among water directors of Iberoamerica, where they can share concerns and responses to the issues and challenges they face necessarily, such as those associated with the processes of legal and institutional reform on the water sector.

Likewise, the importance acquired by CODIA in recent years should be stressed. It has had the institutional support from both the Iberoamerican Forum of Ministers of Environment and the Iberoamerican Summit of Heads of State and Government. Proof of this is the adoption of the proposals and major initiatives of the Conference; "Iberoamerican Water Programme" and "Iberoamerican Water Training Programme".

- **Iberoamerican Water Training Programme**

The Iberoamerican Water Training Programme was adopted at the VIII CODIA (Lima, December 2007), in compliance of the mandate of the VII Iberoamerican Forum of Ministers of Environment.

This Training Programme is designed to meet regional needs for training and exchange of experiences in planning and integrated watersheds and water resources management in Latin America in the technical, managerial and political levels.

It is structured, as follows, in ten subject areas identified as priorities by the Iberoamerican countries, including one dedicated to Climate and Extreme Events, and it also has the support and participation of various Latin American Networks for the exchange of knowledge in the development of the various training proposals:

SUBJECT AREAS	COORDINATORS	
Basic		
PLANNING, BASIN HANDLING AND MANAGEMENT (IWRM)	Brazil	Colombia, Guatemala, Peru, UNEP
WATER AND ENVIRONMENT, HYDROLOGY, MODELATION	Argentina	Brazil, Costa Rica, Spain
WATER SUPPLY AND SANITATION	Uruguay	Colombia, Spain, Mexico
Cross-cutting		
GOVERNANCE	Guatemala	Brazil, Colombia, Honduras, Spain
GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING TECHNOLOGIES	Peru	Argentina, Spain, Mexico
Specific		
HYDROGEOLOGY	Cuba	Panama, UNEP
CLIMATE AND EXTREME EVENTS	Brazil	Cuba, UNEP
WATER QUALITY	Argentina	Uruguay, UNEP
WATERWORKS, IRRIGATION AND ENERGY	Portugal	Argentina, Chile
GLACIOLOGY	Chile	Peru, Bolivia, UNEP

- **Iberoamerican Water Programme**

On the other hand, the XVIII Iberoamerican Summit of Heads of State and Government (El Salvador, October 2008) approved the Iberoamerican Water Programme, which includes the whole Training Programme and its main objective is training and technology transfer in the management of water resources, with particular emphasis on small-scale water supply and sanitation, in order to increase water supply and access to basic sanitation to the most vulnerable people in the region. It seeks, ultimately, to make significant progresses towards the achievement of the water related Millennium Development Goals (MDGs). In this regard, the Iberoamerican Water Programme has the following four lines of action:

1. Provide training on integrated water resources management to the whole region, at managerial and technical level, by developing a training programme adapted to the needs and singularities of each country and mainly through the dissemination of already developed and contrasted successful experiences.
2. This Training Programme emphasizes on small-scale sanitation and water treatment, by establishing a Research, Testing and Training Centre for non conventional technologies of water purification in Uruguay, but that will give coverage to the whole region, which will favour the appropriate transfer and technological development through dialogue of stakeholders and countries.
3. Institutional strengthening of local, regional and national authorities, to facilitate better water planning and governance.
4. Support the CODIA and the work of its Technical Secretariat.

BIODIVERSITY

Annual capacity building activities (seminars) on:

- Protection against Wildfires in forests for the Iberoamerican countries.
- Forest-Hydrological Restoration and Protection and Erosion Control (within the framework of United Nations Convention to Combat Desertification).
- Restoration and Protection of natural resources, water, vegetation and soils in Latin- American.

United Kingdom

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Actions financed by United Kingdom (Information dated November 2008)

EU Country	Title	Beneficiary
Actions since 2002		
UK financed (supported process; discussions were autonomous)	Scaling Up Climate Change responses (2005 – 2009)	**ECLAC, LAC Steering committee (Argentina, Chile, Peru, Mexico) and Mexico**
UK (financed only not involved in analytical content)	Economics of Climate Change Study	**Brazil**
UK (financed only not involved in analytical content)	Economics of Climate Change Study	**Mexico**
UK (financed only not involved in analytical content)	Economics of Climate Change Study	**Caribbean**
UK (financed only not involved in analytical content)	Economics of Climate Change Study	**Central America**
UK (financed only not involved in analytical content) Co-funded with with Denmark, UNECLAC + IADB	Economics of Climate Change Study	**South America**
UK (financed and supported process) and co-funded with Denmark	Economics of Climate Change course for key policy-makers in the region	**Argentina, Bolivia, Chile, Colombia, Paraguay, Peru, Uruguay and Venezuela**
UK (financed and supported process) and co-funded with Denmark	Climate Change Leadership Programme for business leaders	**Argentina, Bolivia, Chile, Colombia, Paraguay, Peru, Uruguay and Venezuela**
UK (financed only not involved in analytical content)	Impacts of climate change on the region's mining industry study	**Colombia, Chile, Argentina and Peru**
UK (financed only not involved in analytical content)	Impacts of climate change on the wine industry study	**Argentina and Chile**
UK (financed and supported process) and co-funded with Denmark	Working with the Media and Government Press Officers to Enhance Coverage of the Negotiations	**Argentina, Bolivia, Chile, Colombia, Peru, and Venezuela**
UK (financed and supported process)	Regional engagement with Finance Ministries on UNFCCC negotiations	**South America**
UK (financed and supported process) and co-funded with Denmark	Regional capacity-building workshops for international climate change negotiators and policy-makers	**South America**
Future actions		
Financing Scaled Up approaches	Enabling environment for program based sectorial approaches.	**Panama and LAC**
Support capacity in negotiations	Facilitate exchanges with EU approaches and programs -and LAC positions	**Regional organizations and negotiators**

Specific objective	Sector	Budget	Date beginning / end
Mainstream climate change responses across sectors, and scale up uptake of finance and technology for low carbon and climate resilient development.	Energy, Transport, Environment, Economy/ Planning	£ 270,000	
Make an economic assessment of the impacts of climate change in Brazil	Economy/Planning	£ 975,025	Dec 2007 - March 2009
Make an economic assessment of the impacts of climate change in Mexico	Economy/Planning	£ 200,000	Jan 2008 - Nov 2008
Make an economic assessment of the impacts of climate change in the Caribbean	Economy/Planning	US$ 222,000 to date	June 2008 - Sept 2010
Make an economic assessment of the impacts of climate change in Central America	Economy/Planning	£ 60,000 to date	Dec 2007 - Sept 2009
Make an economic assessment of the impacts of climate change in South America	Economy/Planning	£ 700,000	
The objectives are to mainstream climate change across high-level policy making; and to highlight the importance of pushing for an ambitious Copenhagen deal.	Key policy-makers from the Finance, Environment and Foreign Affairs Ministries and Presidency's office	£ 53,219	Apr to July 2009
To train influential business leaders from the region on the economic opportunities of moving towards a low-carbon economy for their sectors and the importance of pushing governments for an ambitious Copenhagen agreement.	From the region's mining, agricultural and finance sectors,	£ 47,105	Apr to July 2009
Make a study on the impacts of climate change on the mining industry, in Colombia, Chile, Argentina and Peru	Private Sector	£ 92,940	Apr 2009 to Mar 2010
Sectoral report on the impacts of climate change in the wine industry	Private Sector	£ 70,000	Apr to Nov 2009
To enhance the quantity and quality of climate change news ahead of international climate change events	Media	£ 110,910	Apr to June 2009
Regional workshop with ministries from the region to raise awareness of and agree positions on the finance options that have been tabled	Finance/ Planning	£ 20,000	Sep 2009
Capacity-building workshop aimed at climate change negotiators and influential policy makers from the fourteen governments in the region	Finance, Environment, Foreign Affairs	£ 42,500	Apr 2009 to Feb 2010
Evaluate potential for deployment of large scale low carbon programs in energy, power and other sectors in LAC and enhancing Private Sector Participation	Energy, Environment, Economy/Planning	£ 70,000	
Identify points of coincidence and divergence between LAC countries in specific issues, and areas where potential cooperation in low carbon policies and programs could be enhanced.	Economic / Planning		

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América Latina. Portal Europeo; Información e investigación Europeas sobre América Latina, http://www.red-redial.net/

CAIT-World Resources Institute – Climate Indicators Website, http://cait.wri.org/

Clean Development Mechanism (CDM), http://unfccc.int/135igar_protocol/mechanisms/clean_development_mechanism/items/2718.php

Clima Latino, http://www.comunidadandina.org/desarrollo/climalatino1.htm

Collaborative Partnership on Forests and climate change http://www.fao.org/forestry/cpf-climatechange/en/

CTA-Technical Centre for Agricultural and Rural Cooperation ACP-EU. http://ctaseminar2008.cta.int/

Environmental helpdesk in EC development cooperation, http://www.environment-integration.eu/

Europa, Summaries of legislation, Tackling Climate Change, http://europa.eu/scadplus/leg/en/s15012.htm

European Commission – Environment, http://ec.europa.eu/environment/index_en.htm

European Commission – Environment – Johannesburg Renewable Energy Coalition, http://ec.europa.eu/environment/jrec/index_en.htm

European Commission – External Assistance and Latin America, http://ec.europa.eu/europeaid/where/latin-america/index_en.htm

European Commission – External Relations and Latin America, http://ec.europa.eu/external_relations/la/index_en.htm

FAO/Montes, 2003, Nicaragua frente al cambio climático

Foro Latinoamericano del Carbono, http://www.latincarbon.com/

Gender and Climate Change, http://www.gencc.interconnection.org/

International Institute for Sustainable Development IISD Earth Negotiations Bulletin on Poznan COP14, http://www.iisd.ca/climate/cop14/

JCR – Global Forest Resource Monitoring – TREES-3, http://www-tem.jcr.it/regions/southamerica.htm

Latin American Network Information Center, http://lanic.utexas.edu/indexesp.html

PNUMA, Foro de Ministros de Medio Ambiente de America Latina y El Caribe, http://www.pnuma.org/forodeministros/00-reuniones/

Sixth Environment Action Programme, http://ec.europa.eu/environment/newprg/intro.htm

TroFCCA – Tropical Forests and Climate Change Adaptation, http://www.cifor.cgiar.org/trofcca/_ref/home/index.htm

UN Collaborative Programme on Reduced Emissions from Deforestation and Degradation in Developing Countries, http://www.undp.org/mdtf/un-redd/overview.shtml

UNESCO, LINKS, cambio climático y Pueblos Indígenas: impactos y respuestas; http://portal.unesco.org/science/es/ev.php-URL_ID=5917&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNFCCC, Non-Annex I national communications, http ://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php

UNITAR – C3D, http://www.c3d-unitar.org/c3d/

UNITAR – Environment, http://www.unitar.org/environment

UNITAR –National Adaptation Programme of Action, http://www.napa-pana.org/

Welcome to the REDD Information sharing platform, http://unfccc.int/methods_science/136ed/items/4531.php

World Bank – Carbon Finance, http://wbcarbonfinance.org/

World Bank – Climate Investment Funds (CIF), http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCC/

EuropeAid

Latinamerican Organisations' Web Sites

Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)
http://www.catie.ac.cr/BancoConocimiento/C/cambio_global_informacion_general_/cambio

Centro del Agua del Trópico Húmedo para América Latina y el Caribe (CATHALAC)
http://www.cathalac.org/index.php?option=com_content&task=view&id=739&Itemid=557

Comisión Centroamericana de Ambiente y Desarrollo,
http://www.ccad.ws/

Comunidad Andina, Agenda Ambiental Andina, cambio climático,
http://www.comunidadandina.org/agenda_ambiental.htm

GTZ Equipo Regional de Competencias "gestión del riesgo y cambio climático en América Latina y El Caribe"
http://www.riesgoycambioclimatico.org/

Mercosur,
http://www.mercosur.int/msweb/portal%20intermediario/es/index.htm

Organización del Tratado de Cooperación Amazónica – Secretaría Permanente,
http://www.otca.org.br/

Organización Latinoamericana de Energía OLADE,
http://www.olade.org.ec/

Red Iberoamericana de Oficinas de cambio climático, (RIOCC)
http://www.lariocc.net/riocc_principal/es/index.htm

Sistema de la Integración Centroamericana,
http://www.sica.int

UNEP, Capacity Development for Clean Development Mechanism, CD4CDM
http://www.cd4cdm.org/

Designated National Authorities' Web Sites

Argentina, Dirección de cambio climático,
http://www.ambiente.gov.ar/?idseccion=29

Bolivia, Oficina de Desarrollo Limpio,
http://www.odl.gov.bo/

Bolivia, Programa Nacional de cambio climático,
http://www.pncc.gov.bo/

Brazil, Departamento de Mudanças Climáticas,
http://www.mma.gov.br/sitio/index.php?ido=conteudo.monta&idEstrutura=141&idMenu=7345

Chile, Bosque PRO Carbono,
http://www.uach.cl/procarbono/index.html

Chile, Comision Nacional del Medio Ambiente,
http://www.conama.cl/portal/

Colombia, Ministerio de Ambiente, Vivienda y Desarrollo Territorial,
http://www.minambiente.gov.co/contenido/contenido.aspx?catID=135&conID=252

Colombia, Oficina Colombiana para la Mitigación del Cambio Climatico,
http://www.cecodes.org.co/cambio_climatico/ocmcc.htm

Costa Rica, Estrategia Nacional de cambio climático,
http://www.encc.go.cr/

Costa Rica, Oficina de Implementación Conjunta cambio climático,
http://www.minae.go.cr/dependencias/dept_ofic/oficina_implementacion_conjunta.html

Cuba,
http://www.medioambiente.cu/

Cuba, Red Producción mas limpia,
http://www.redpml.cu/noticias.asp

Ecuador, Ministerio del Ambiente, Dirección Nacional de cambio climático, producción y Consumo Sustentable, http://www.ambiente.gov.ec

El Salvador, cambio climático, http://www.marn.gob.sv/?fath=20&categoria=124&subcat=Y

Guatemala, Unidad de cambio climático, http://www.marn.gob.gt/dependencias/cambio.html

Honduras, http://www.serna.gob.hn/comunidad/unidades/cambio_climatico/Paginas

México, cambio climático, Instituto Nacional Estadisticas, http://cambio_climatico.ine.gob.mx/

Nicaragua, http://www.marena.gob.ni/index.php?option=com_content&task=view&id=17&Itemid=247

Panamá, Unidad de cambio climático y Desertificación, http://www.anam.gob.pa/uccd/

Paraguay, Programa Nacional de cambio climático, http://www.pncc.gov.py/sobre_oncc.php

Peru, FONAM, Fondo Nacional Ambiente, http://www.fonamperu.org/default.php

Uruguay, Unidad de cambio climático, http://www.cambioclimatico.gub.uy//index.php

Venezuela, http://www.minamb.gob.ve/index.php?option=com_content&task=view&

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http://ec.europa.eu/europaid/index_en.htm